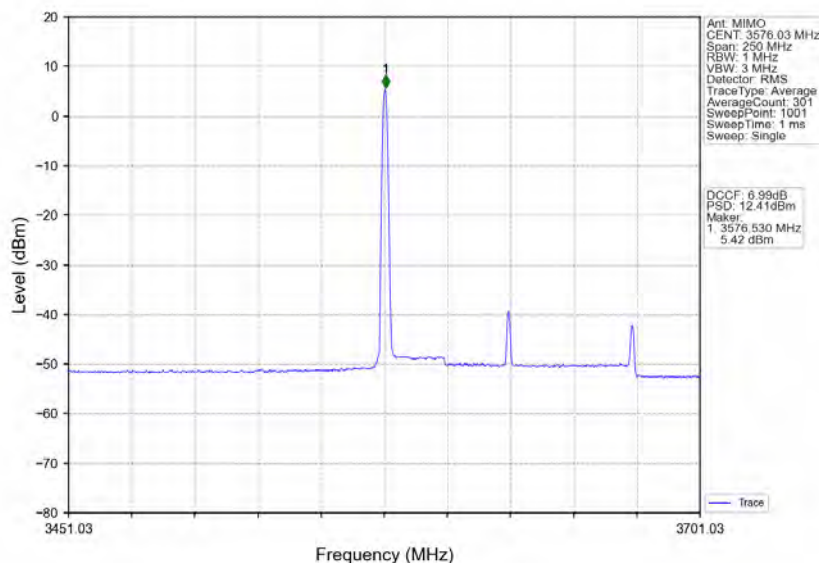
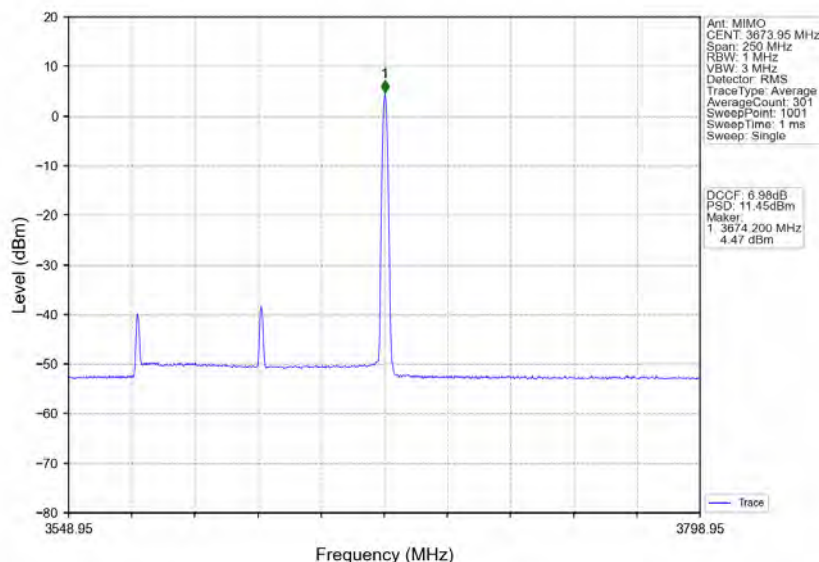


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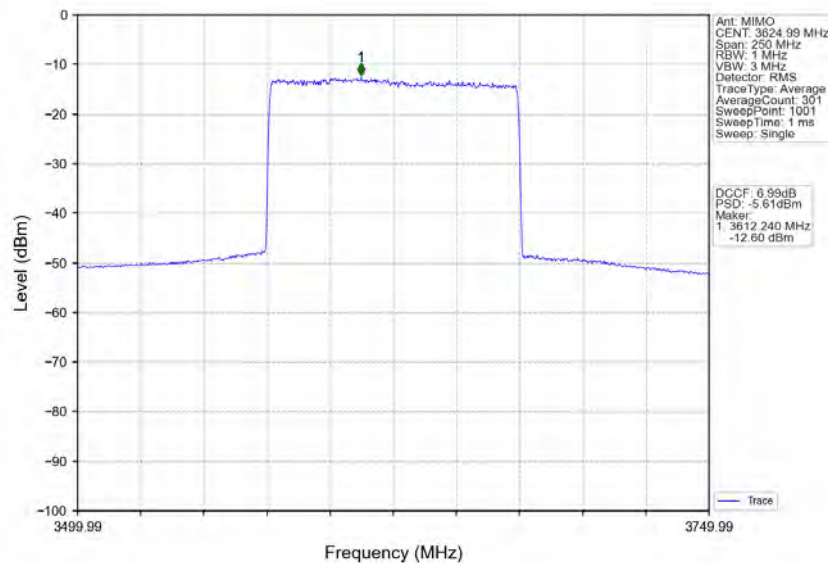
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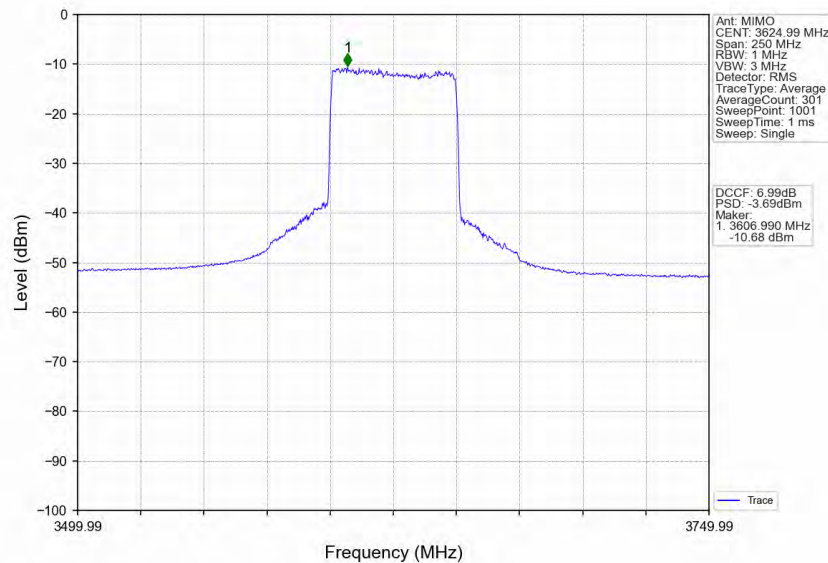
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n78d_30kHz_MIMO_NTNV_100MHz_CP-OFDM_16_QAM_3624.99MHz_Outer_Full



n78d_30kHz_MIMO_NTNV_100MHz_CP-OFDM_16_QAM_3624.99MHz_Inner_Full



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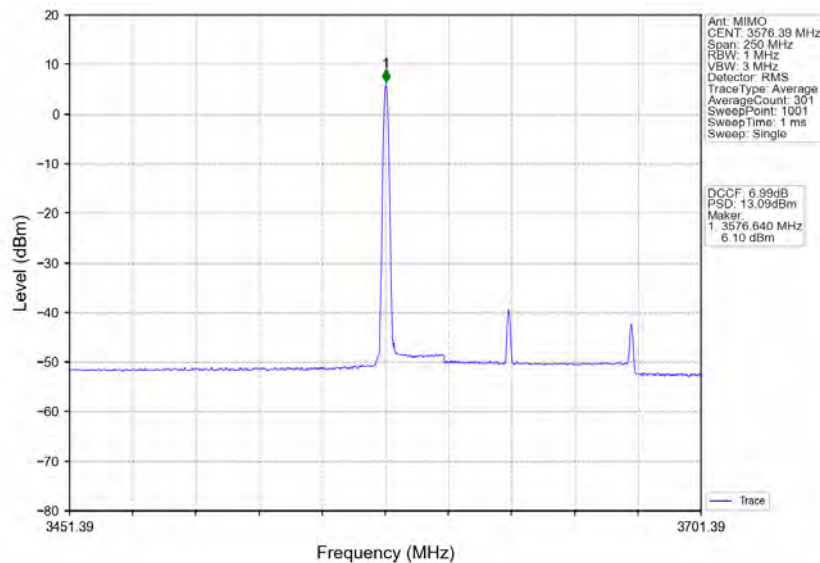
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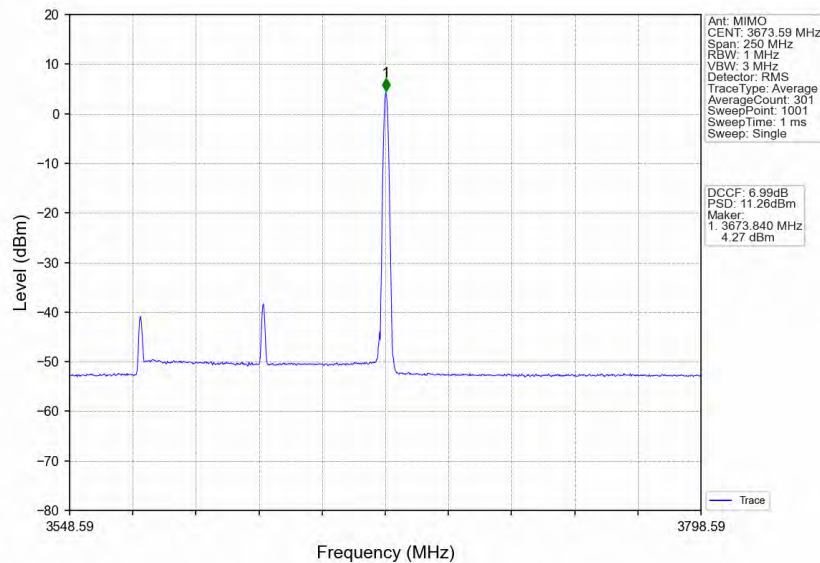
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n78d_30kHz_MIMO_NTNV_100MHz_CP-OFDM 16 QAM 3624.99MHz_Inner_1RB_Left



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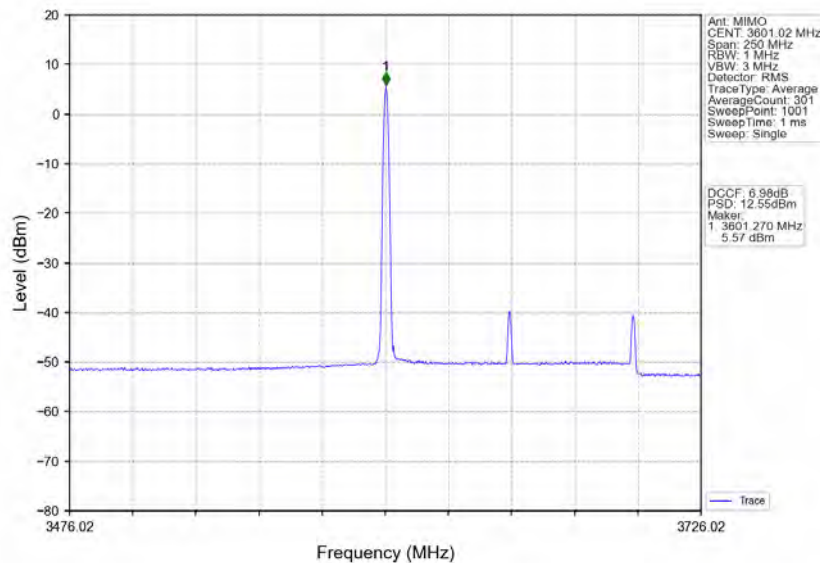
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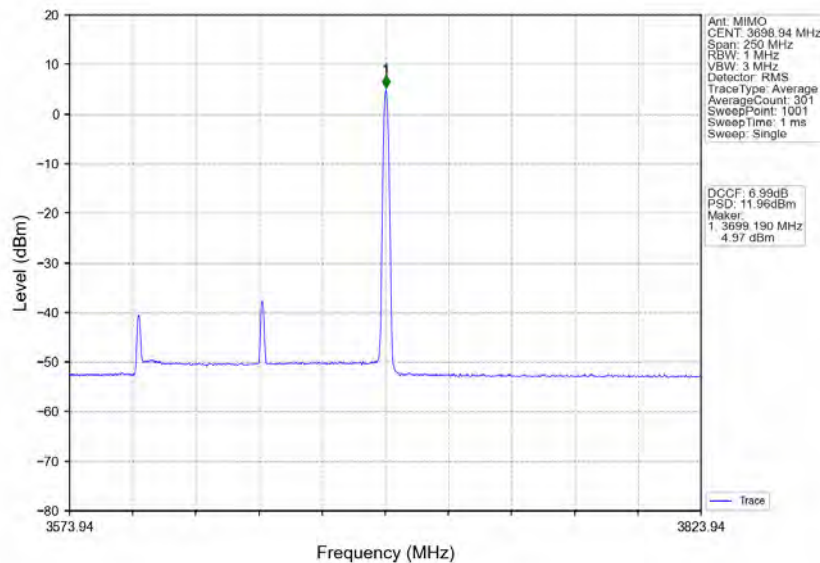
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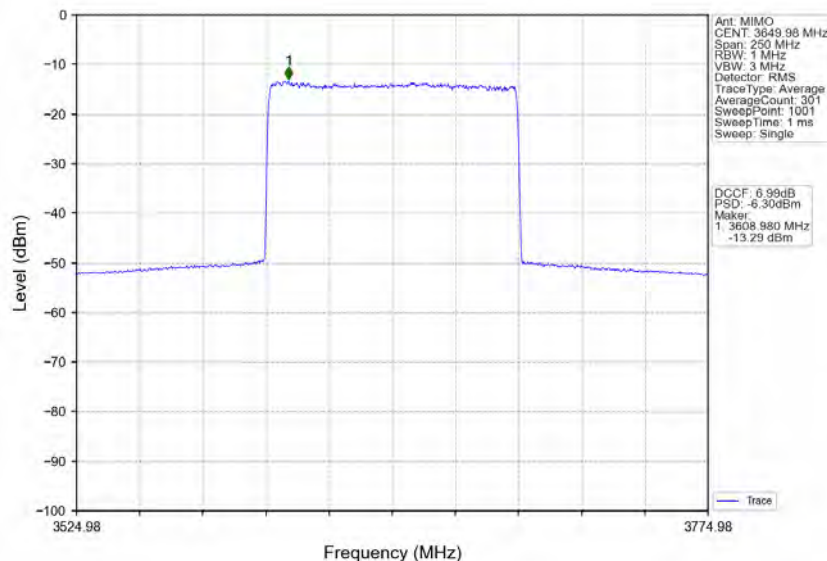
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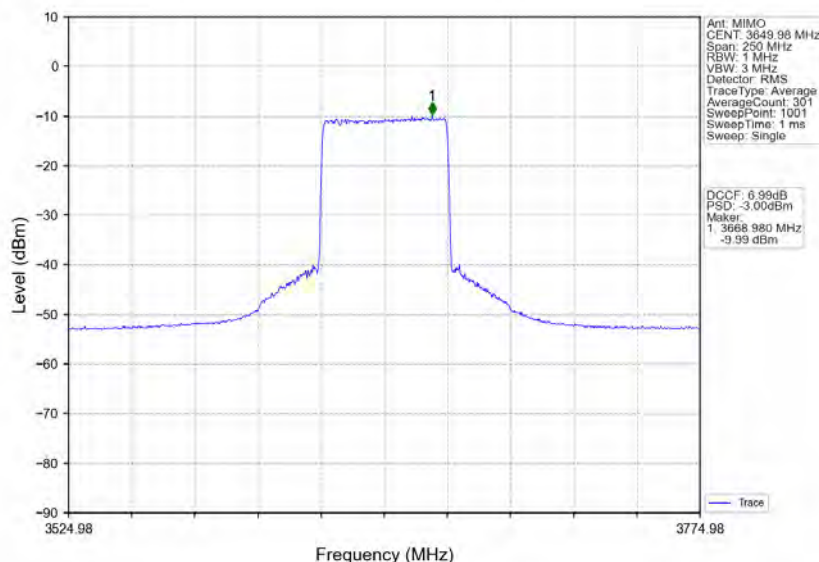
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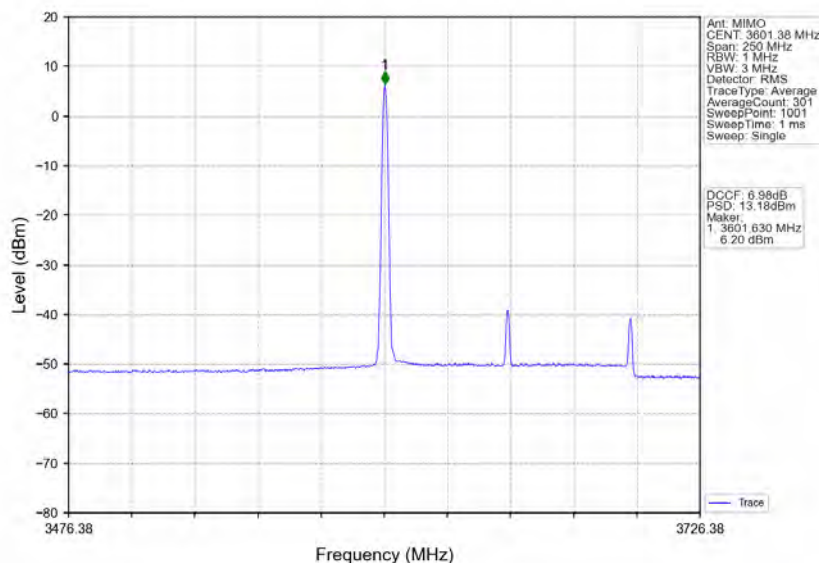
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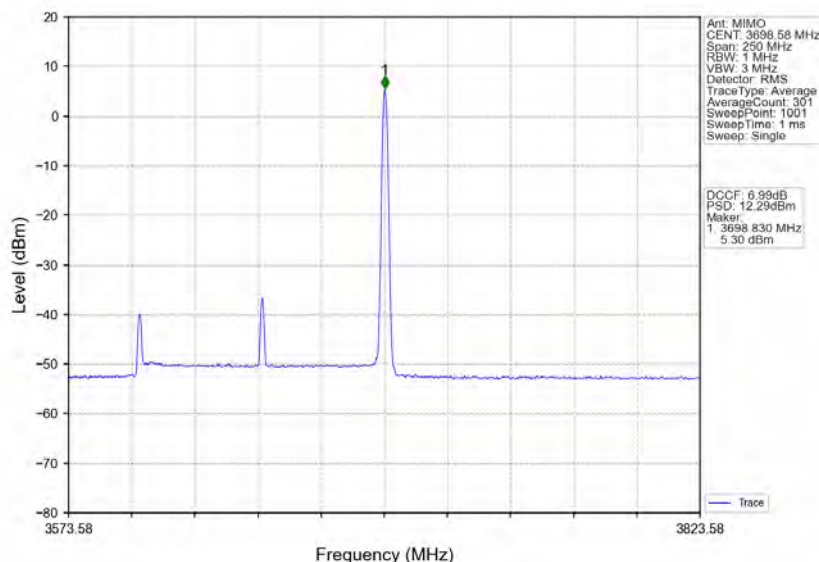
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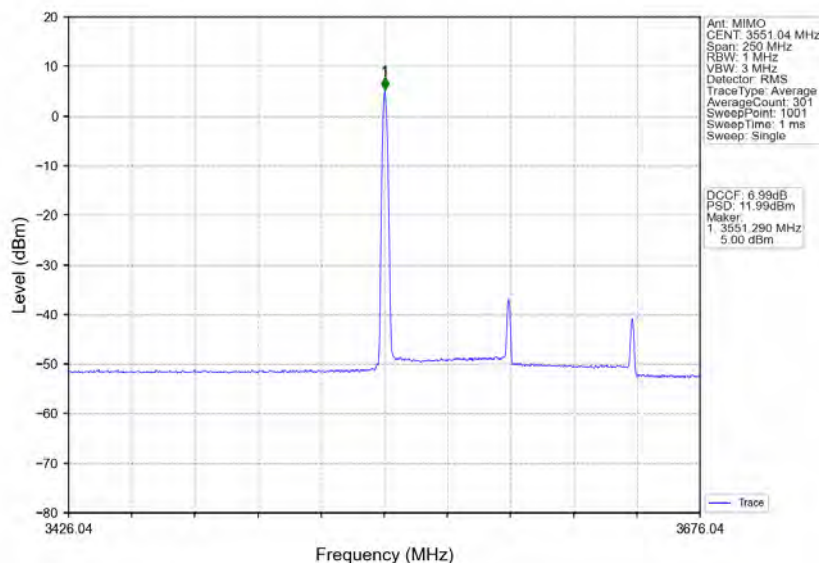
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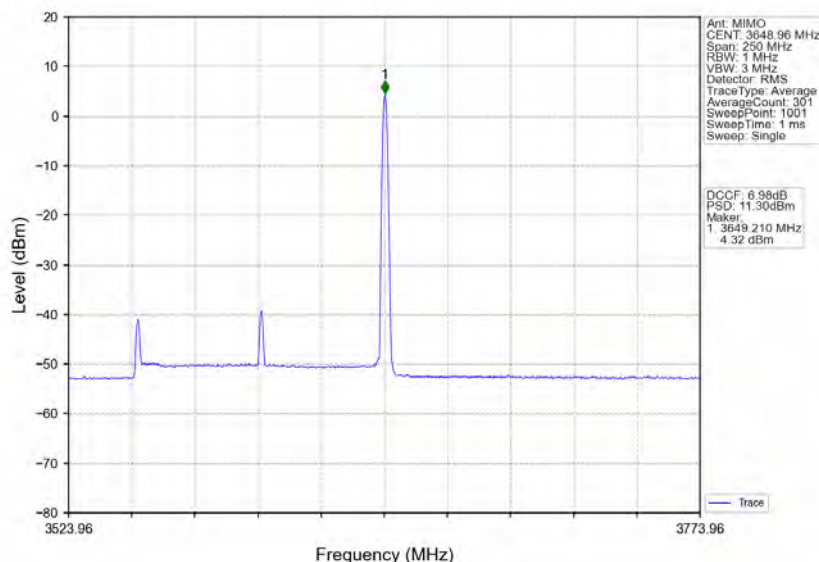
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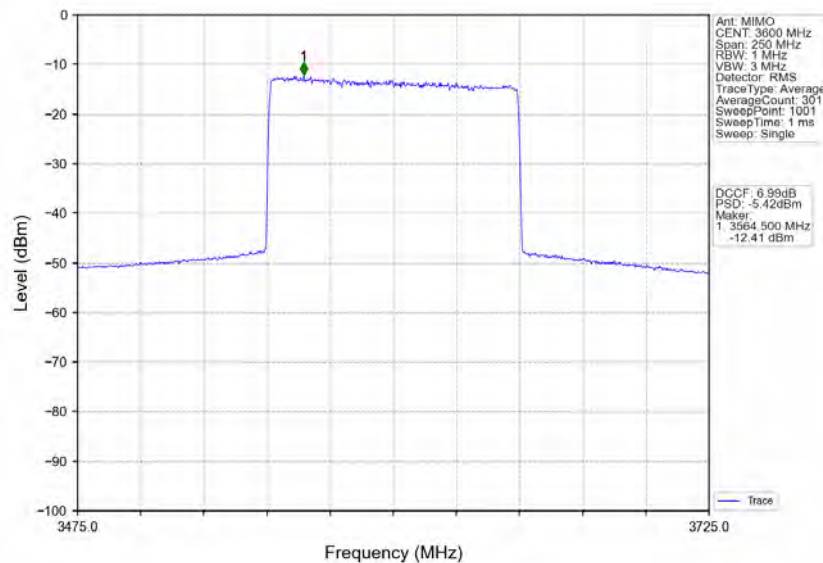
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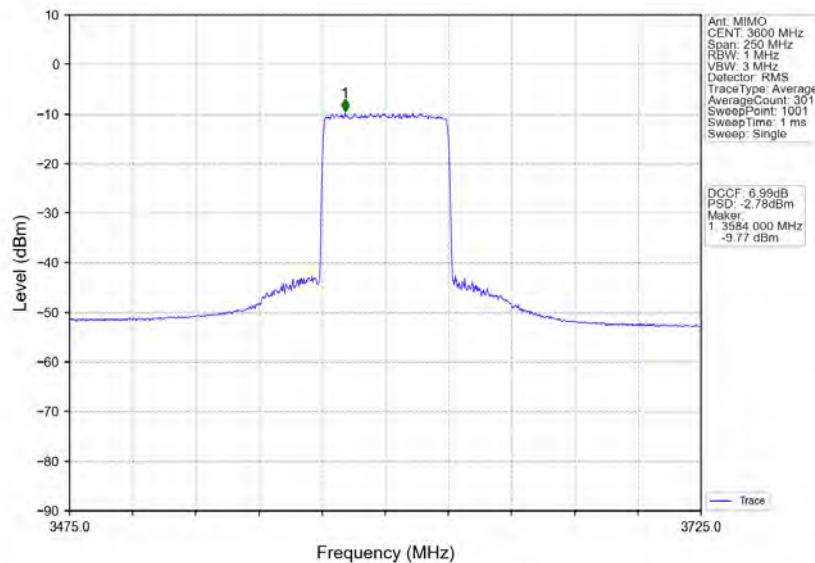
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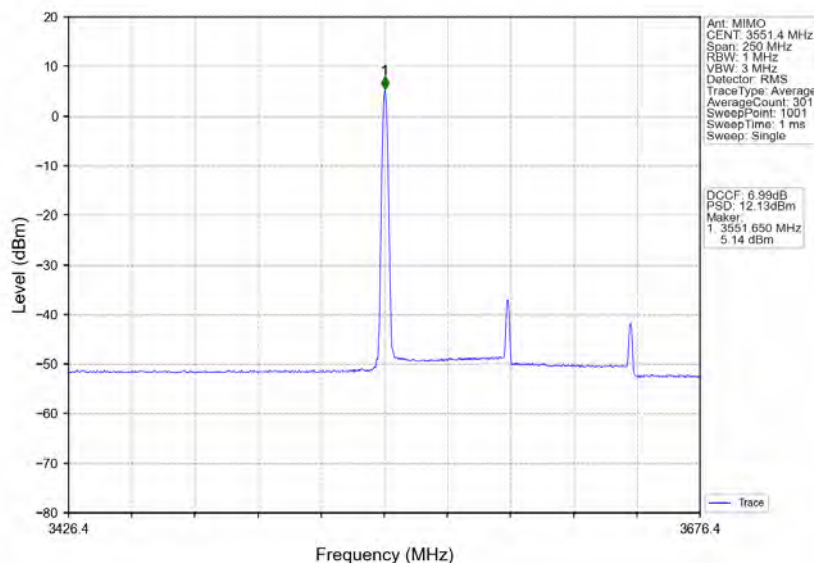
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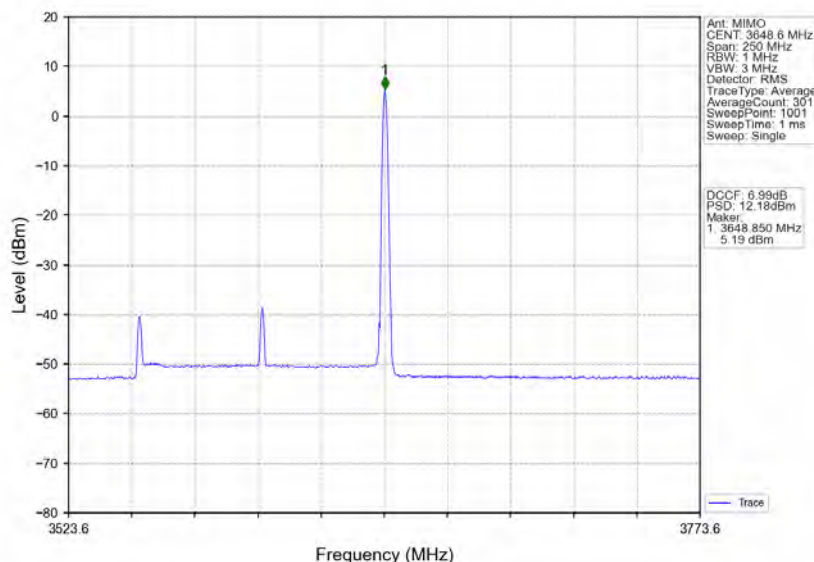
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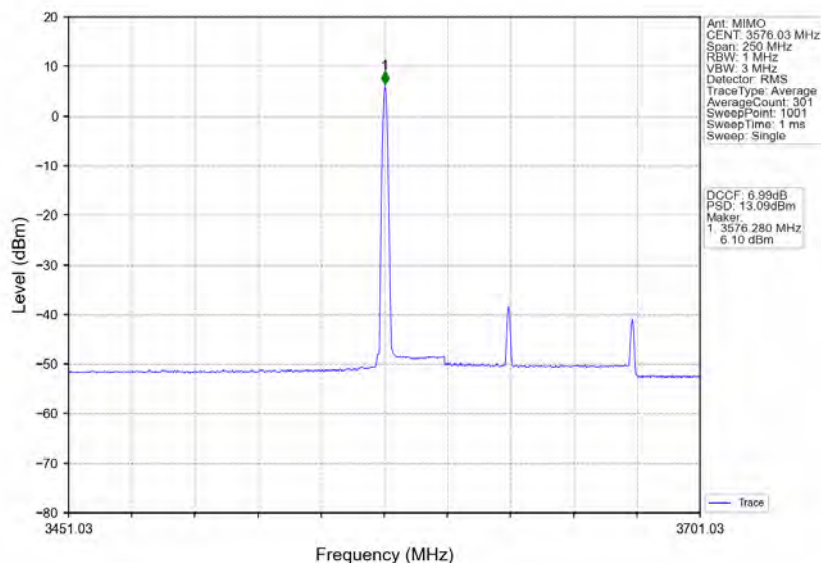
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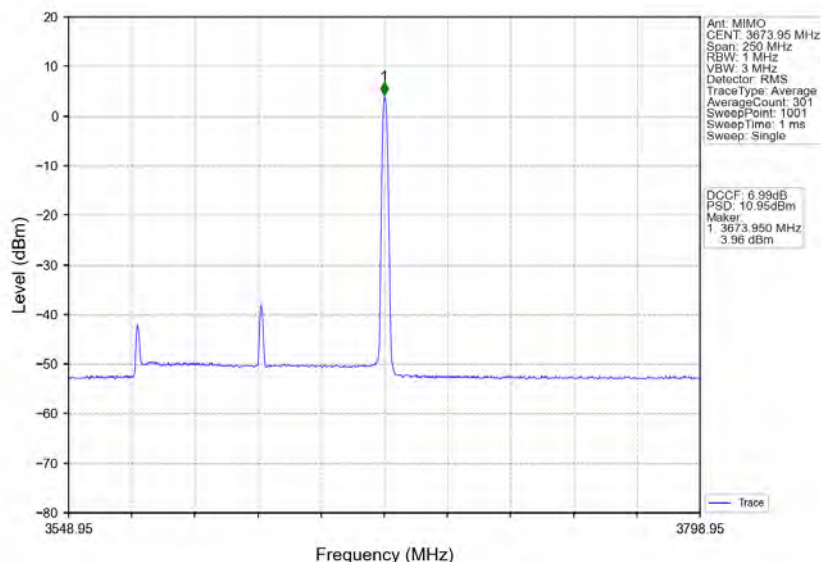
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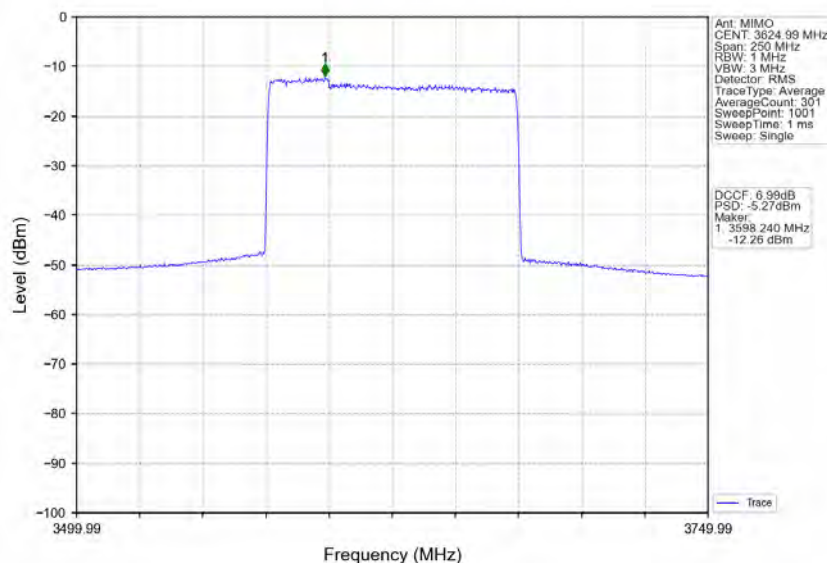
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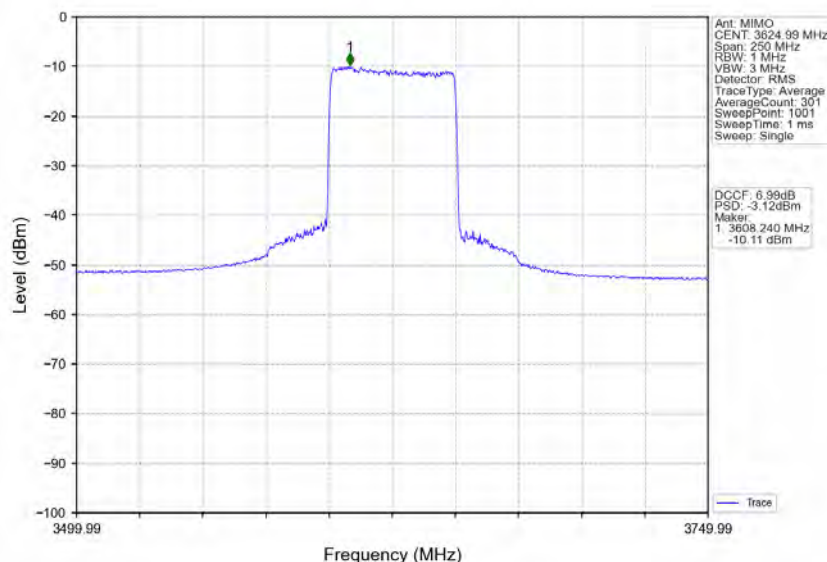
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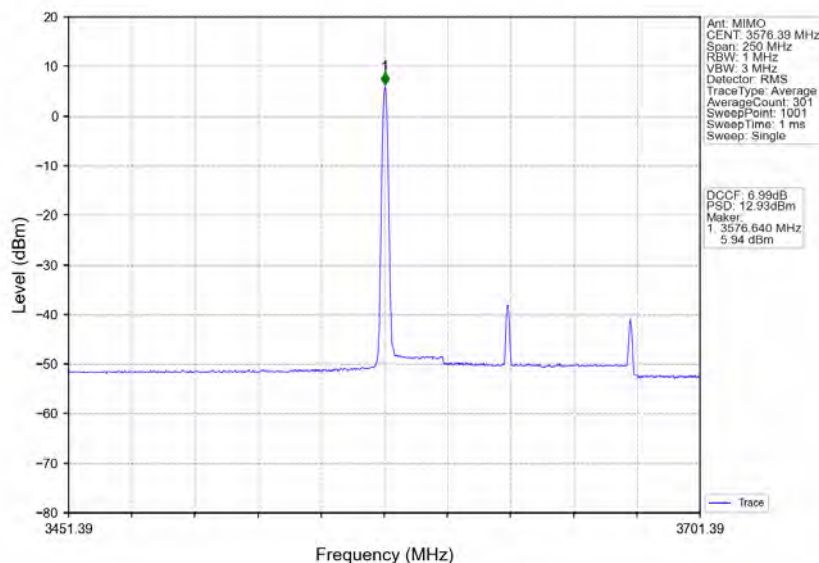
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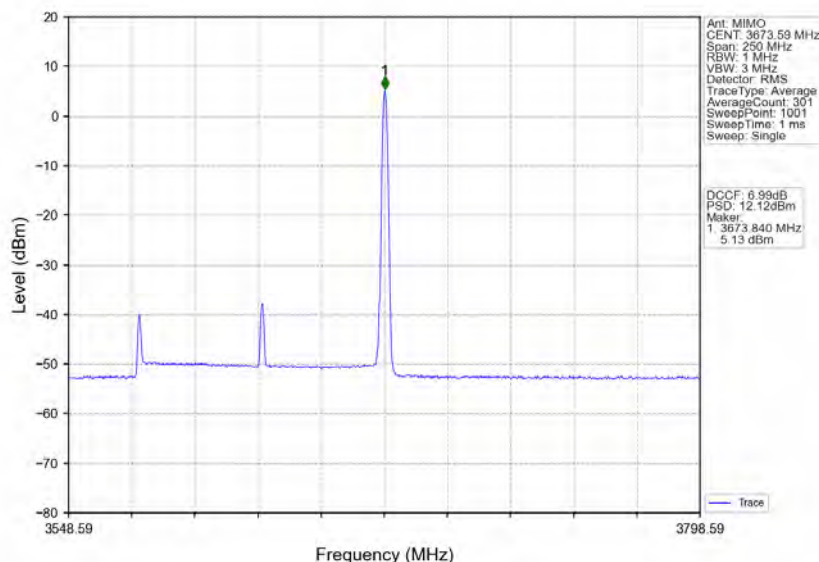
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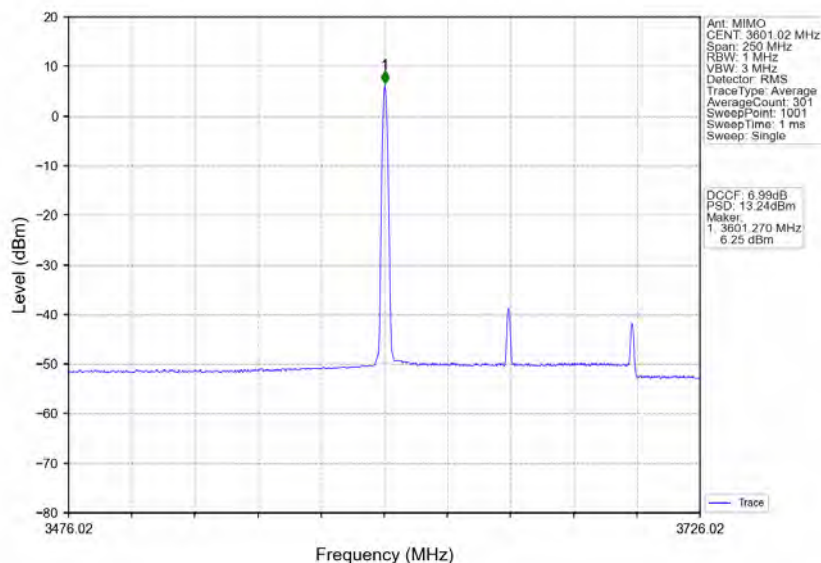
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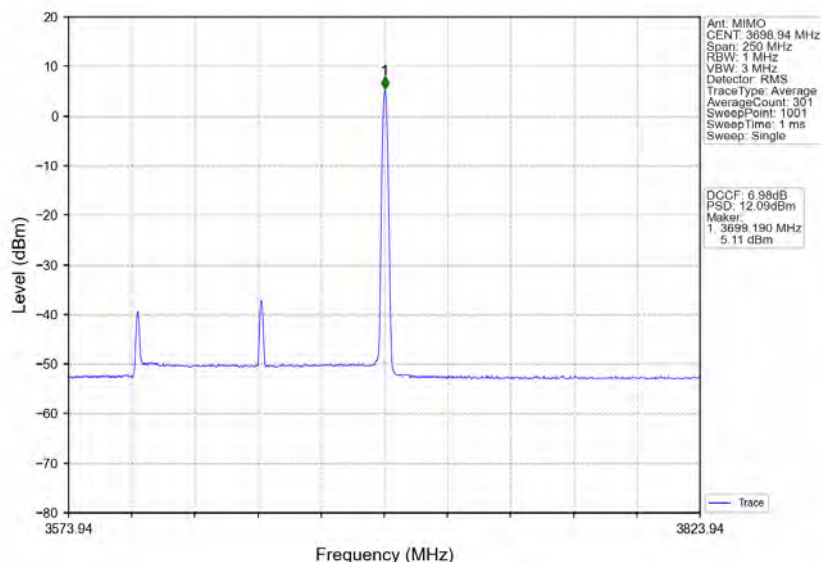
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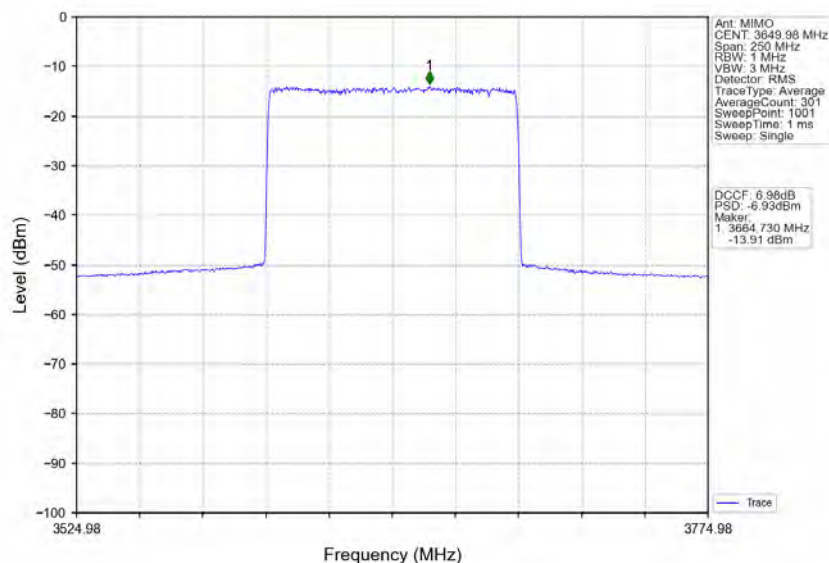
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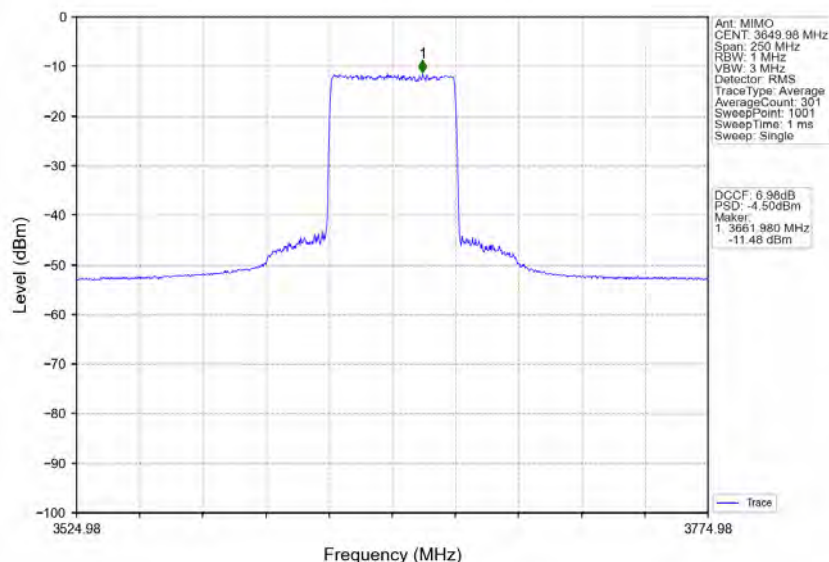
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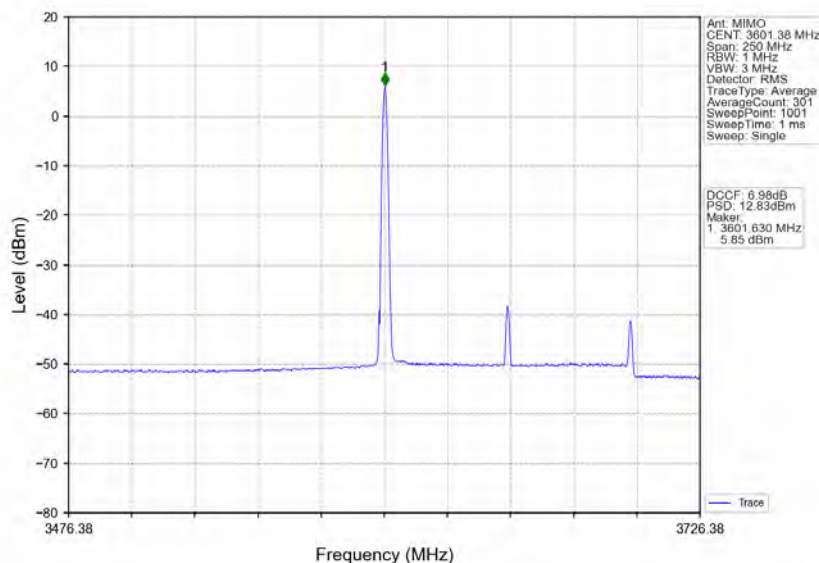
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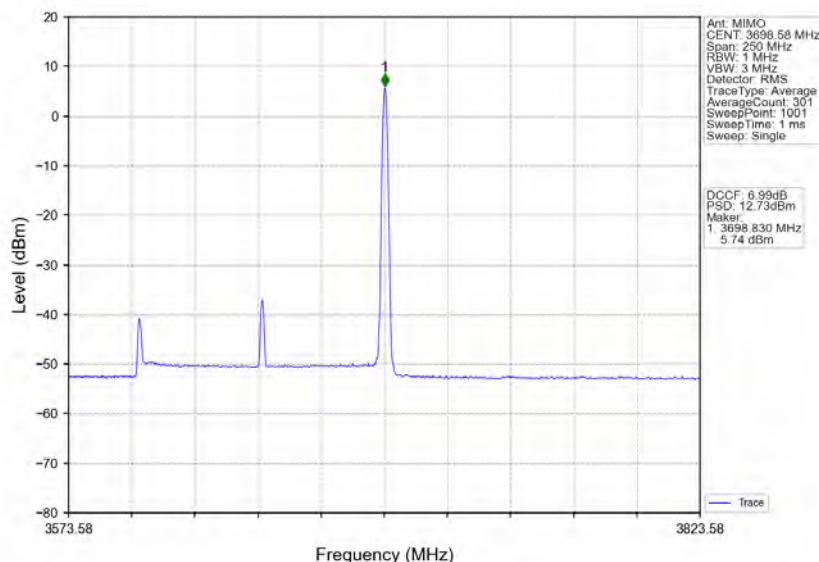
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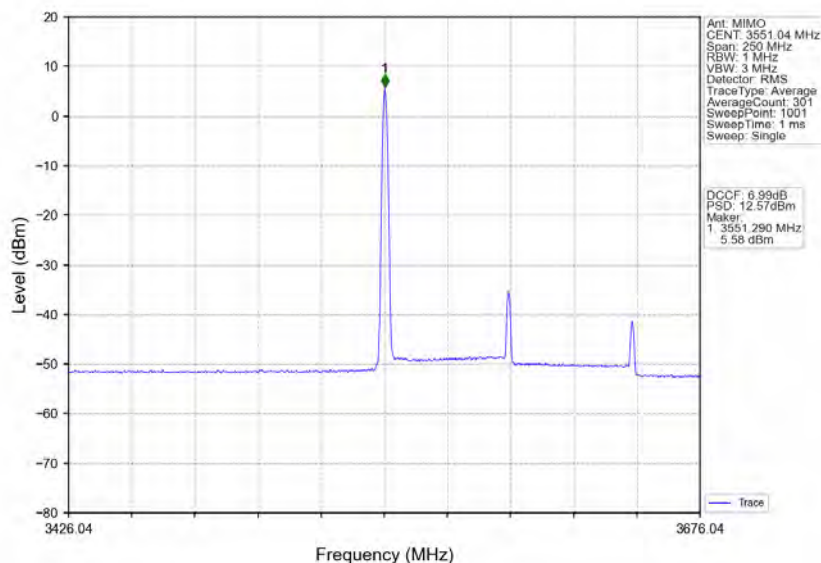
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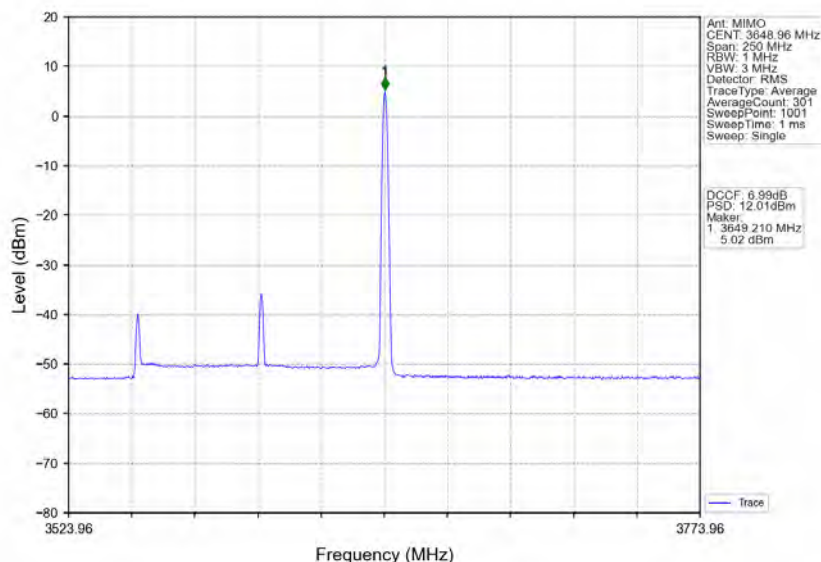
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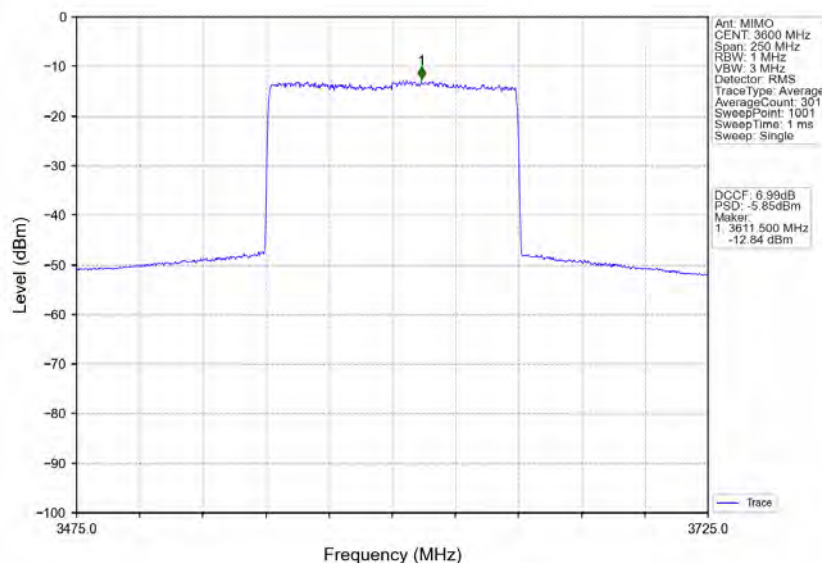
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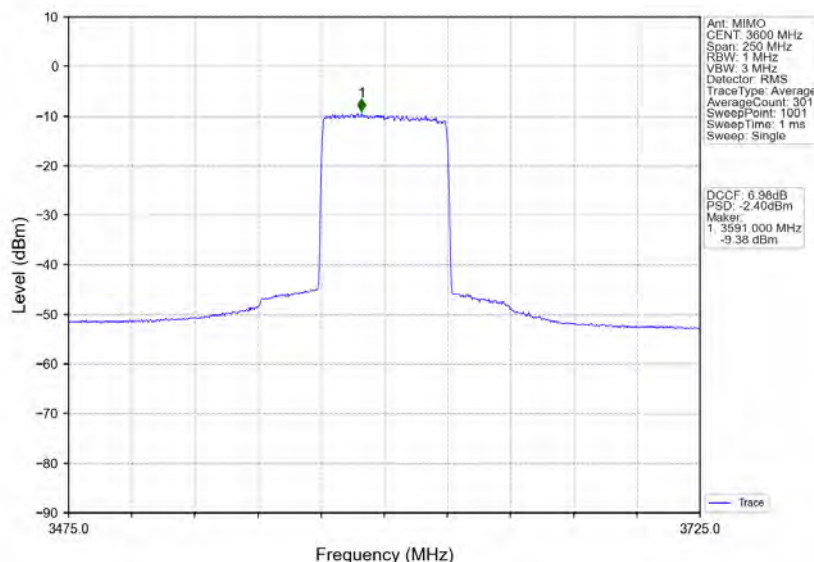
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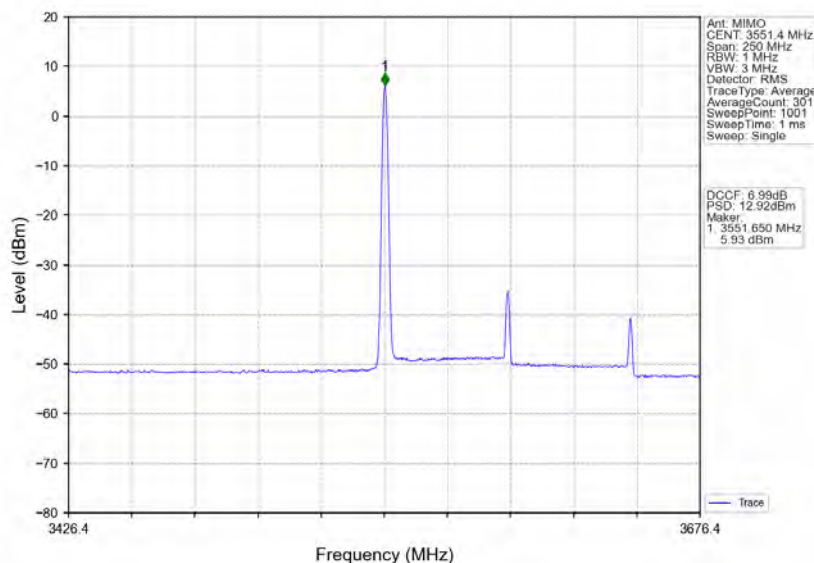
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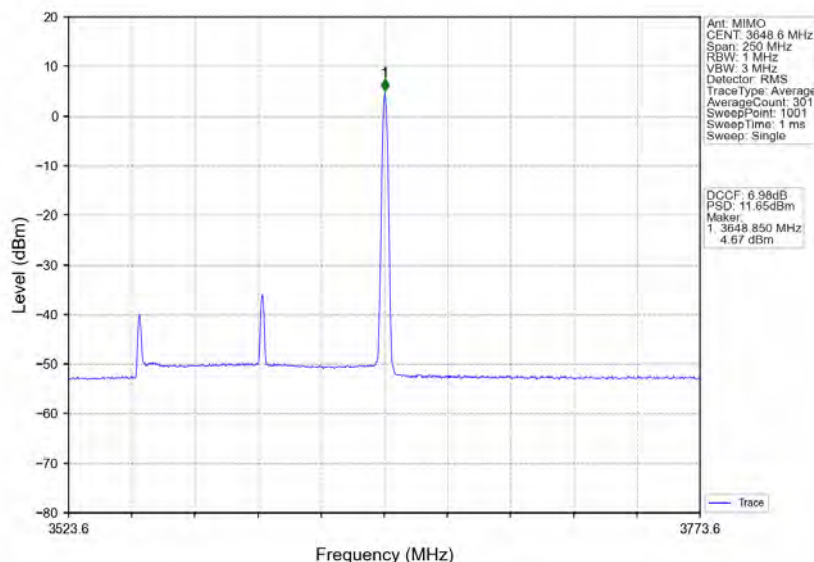
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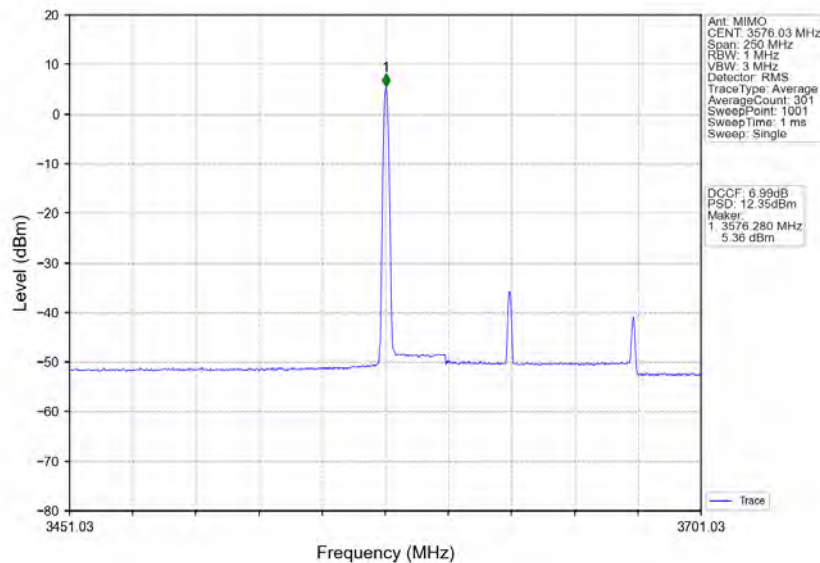
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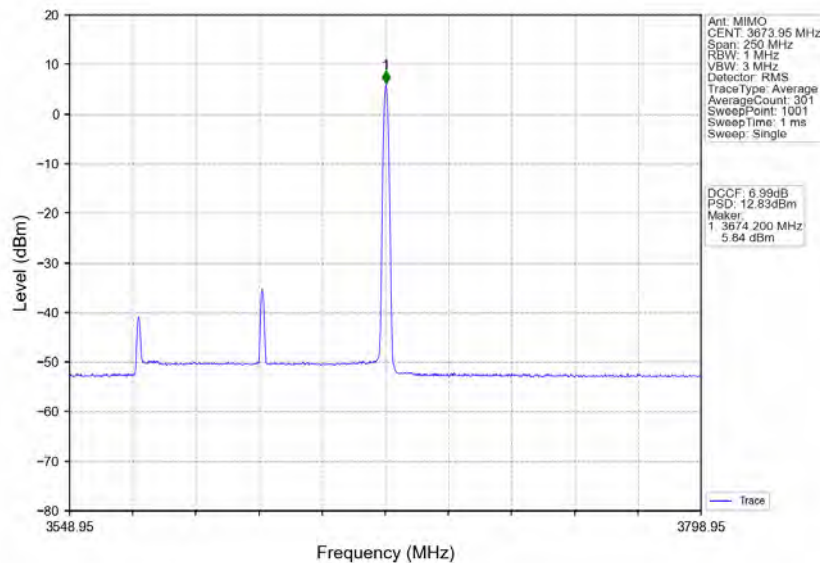
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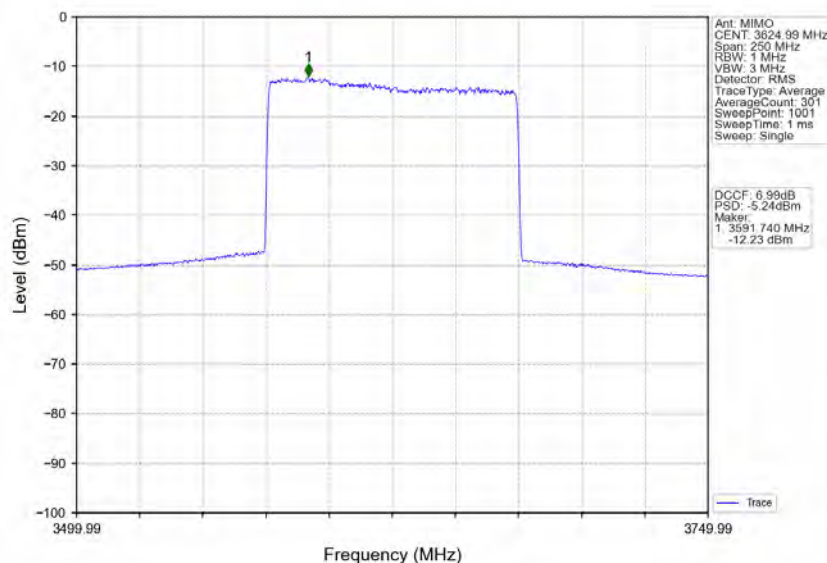
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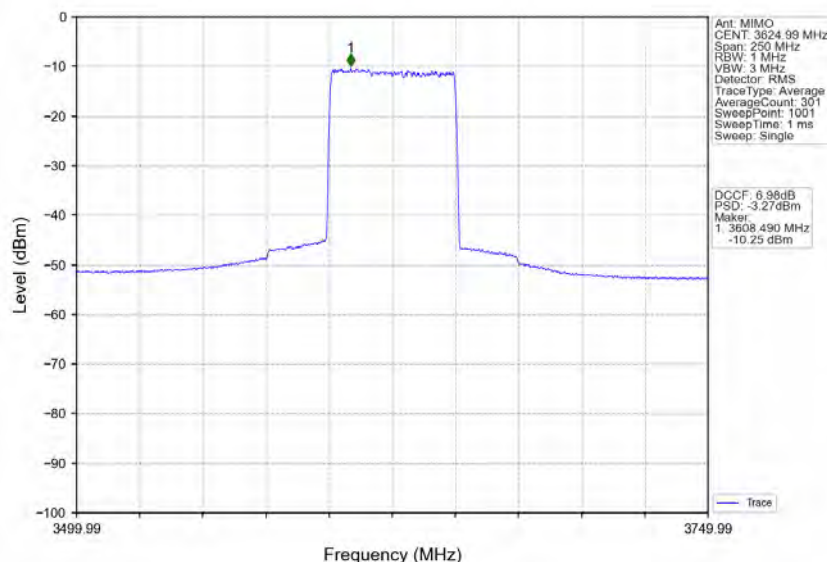
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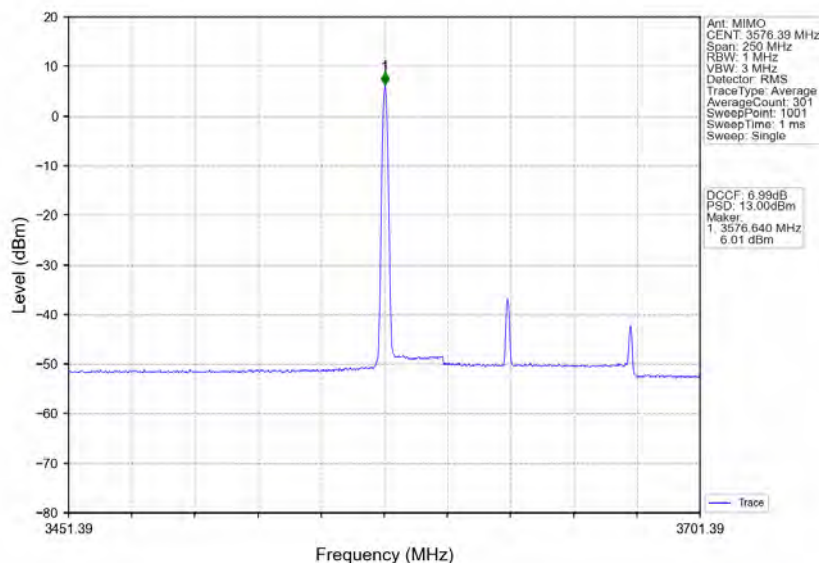
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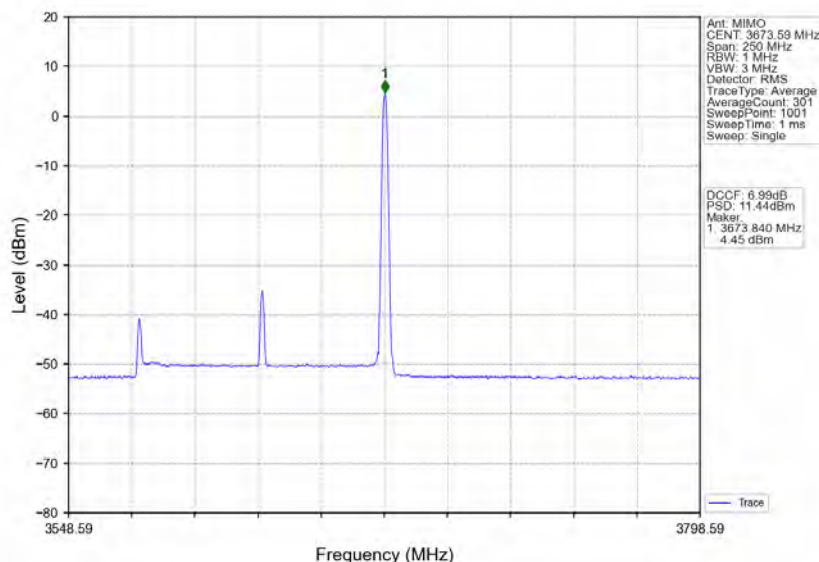
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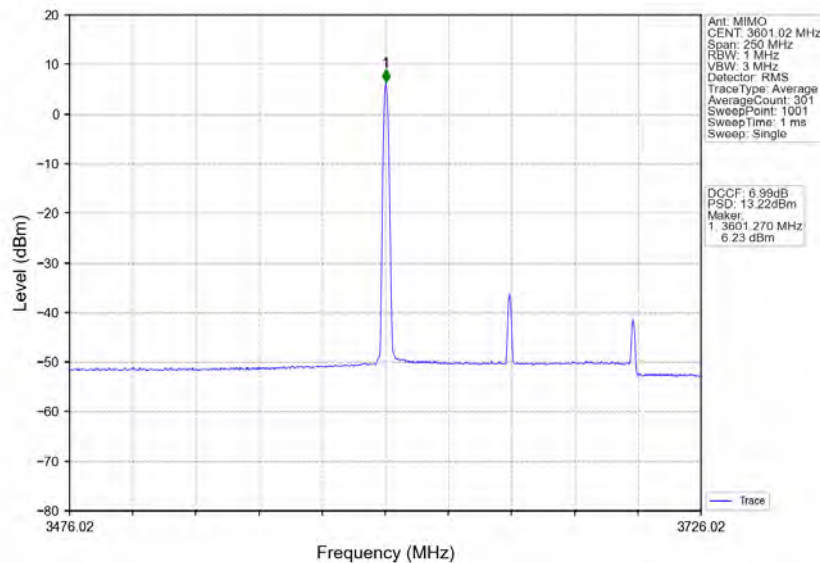
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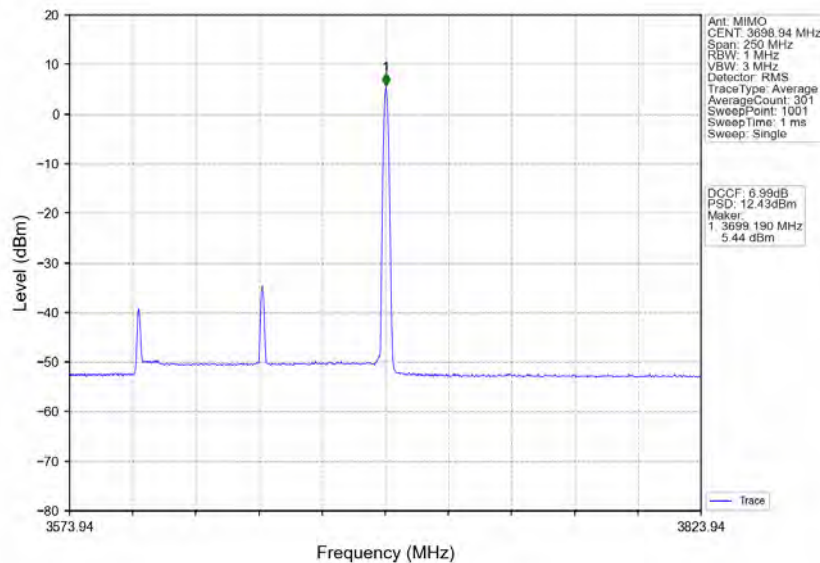
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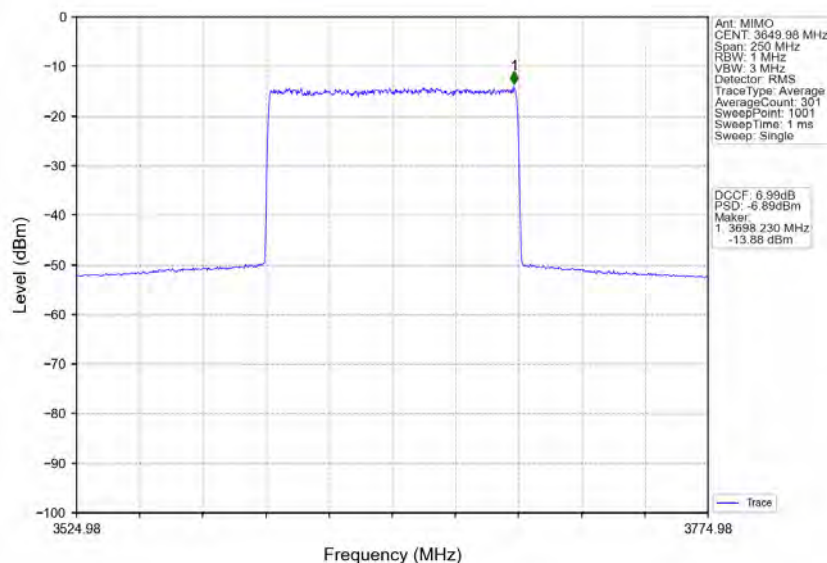
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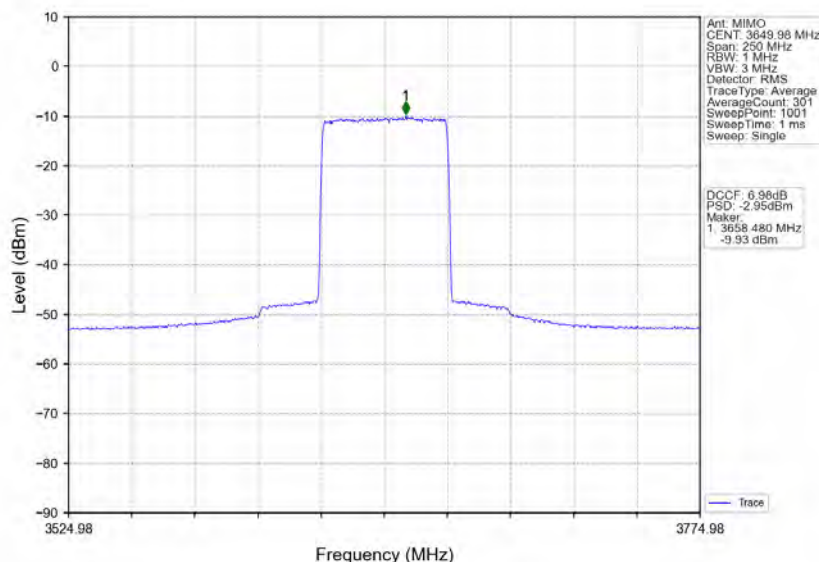
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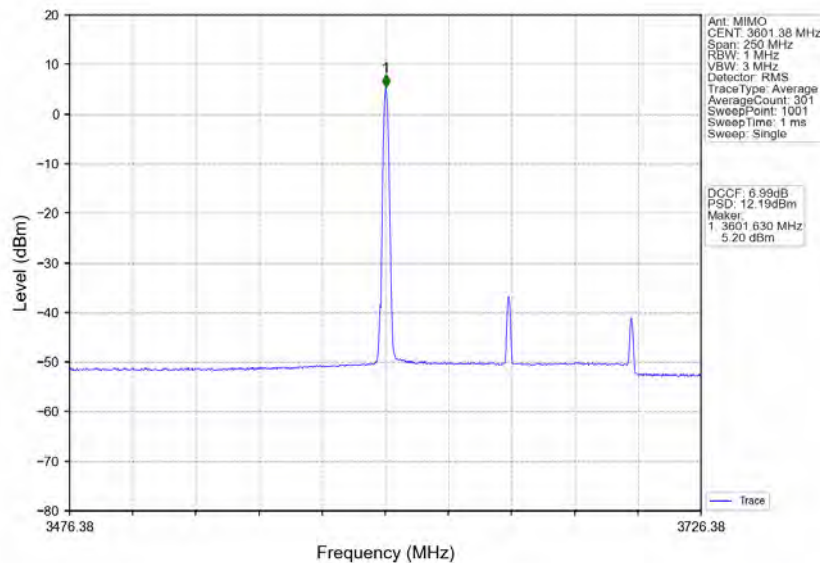
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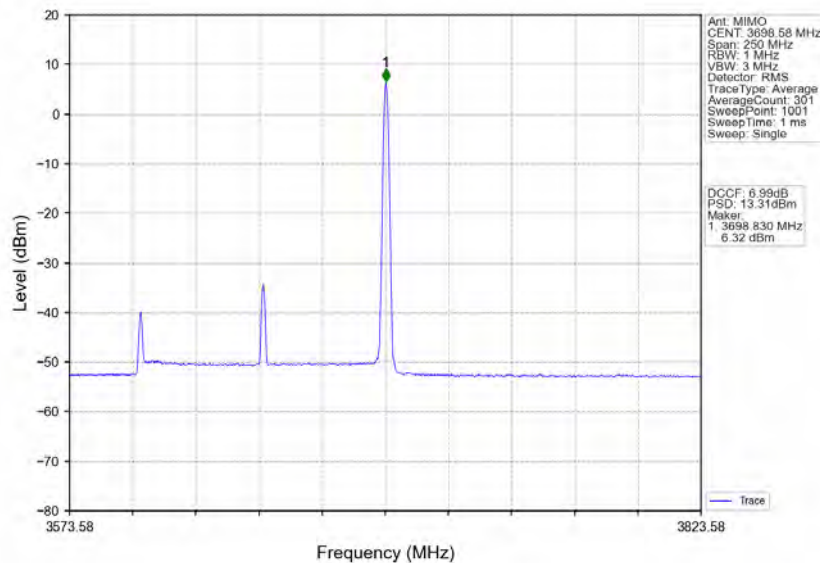
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3. Frequency Stability

3.1 30k MIMO 10MHz

3.1.1 Test Result

5G NR n78d SCS=30kHz MIMO 10MHz								
Modulation	Frequency (MHz)	RB Allocation	Temp. (°C)	Volt.	Freq. Error (Hz)	Freq. vs. rated (ppm)		Verdict
						Result	Limit	
CP-OFDM QPSK	3624.99	Outer_Full	20	LV	6.40	0.0018	>=-2.5 & <=2.5	Pass
				HV	10.00	0.0028	>=-2.5 & <=2.5	Pass
			-30	NV	9.00	0.0025	>=-2.5 & <=2.5	Pass
			-20	NV	9.50	0.0026	>=-2.5 & <=2.5	Pass
			-10	NV	-14.00	-0.0039	>=-2.5 & <=2.5	Pass
			0	NV	-4.80	-0.0013	>=-2.5 & <=2.5	Pass
			10	NV	1.50	0.0004	>=-2.5 & <=2.5	Pass
			20	NV	8.70	0.0024	>=-2.5 & <=2.5	Pass
			30	NV	5.50	0.0015	>=-2.5 & <=2.5	Pass
			40	NV	5.30	0.0015	>=-2.5 & <=2.5	Pass
50	NV	9.50	0.0026	>=-2.5 & <=2.5	Pass			
CP-OFDM 16 QAM	3624.99	Outer_Full	20	LV	-5.70	-0.0016	>=-2.5 & <=2.5	Pass
				HV	13.40	0.0037	>=-2.5 & <=2.5	Pass
			-30	NV	6.40	0.0018	>=-2.5 & <=2.5	Pass
			-20	NV	10.60	0.0029	>=-2.5 & <=2.5	Pass
			-10	NV	-18.70	-0.0052	>=-2.5 & <=2.5	Pass
			0	NV	6.50	0.0018	>=-2.5 & <=2.5	Pass
			10	NV	-2.40	-0.0007	>=-2.5 & <=2.5	Pass
			20	NV	-12.10	-0.0033	>=-2.5 & <=2.5	Pass
			30	NV	-5.10	-0.0014	>=-2.5 & <=2.5	Pass
			40	NV	9.00	0.0025	>=-2.5 & <=2.5	Pass
50	NV	-10.20	-0.0028	>=-2.5 & <=2.5	Pass			
CP-OFDM 64 QAM	3624.99	Outer_Full	20	LV	15.40	0.0042	>=-2.5 & <=2.5	Pass
				HV	5.40	0.0015	>=-2.5 & <=2.5	Pass
			-30	NV	7.70	0.0021	>=-2.5 & <=2.5	Pass
			-20	NV	-5.50	-0.0015	>=-2.5 & <=2.5	Pass
			-10	NV	-1.20	-0.0003	>=-2.5 & <=2.5	Pass
			0	NV	16.30	0.0045	>=-2.5 & <=2.5	Pass
			10	NV	4.30	0.0012	>=-2.5 & <=2.5	Pass
			20	NV	8.90	0.0025	>=-2.5 & <=2.5	Pass
			30	NV	17.00	0.0047	>=-2.5 & <=2.5	Pass
			40	NV	-8.70	-0.0024	>=-2.5 & <=2.5	Pass
50	NV	3.00	0.0008	>=-2.5 & <=2.5	Pass			
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	10.00	0.0028	>=-2.5 & <=2.5	Pass
				HV	5.70	0.0016	>=-2.5 & <=2.5	Pass
			-30	NV	5.60	0.0015	>=-2.5 & <=2.5	Pass
			-20	NV	17.20	0.0047	>=-2.5 & <=2.5	Pass
			-10	NV	7.70	0.0021	>=-2.5 & <=2.5	Pass
			0	NV	-4.50	-0.0012	>=-2.5 & <=2.5	Pass
			10	NV	3.90	0.0011	>=-2.5 & <=2.5	Pass
			20	NV	15.30	0.0042	>=-2.5 & <=2.5	Pass
			30	NV	2.30	0.0006	>=-2.5 & <=2.5	Pass
			40	NV	-4.70	-0.0013	>=-2.5 & <=2.5	Pass
50	NV	13.60	0.0038	>=-2.5 & <=2.5	Pass			



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No.10, Weiye Road, Innovation Park, Kunshan, Jiangsu, China 215300
中国·江苏·昆山市留学生创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

3.2 30k_MIMO_15MHz

3.2.1 Test Result

5G NR n78d SCS=30kHz MIMO 15MHz								
Modulation	Frequency (MHz)	RB Allocation	Temp. (°C)	Volt.	Freq. Error (Hz)	Freq. vs. rated (ppm)		Verdict
						Result	Limit	
CP-OFDM QPSK	3624.99	Outer_Full	20	LV	-5.00	-0.0014	>=-2.5 & <=2.5	Pass
				HV	7.90	0.0022	>=-2.5 & <=2.5	Pass
			-30	NV	-17.90	-0.0049	>=-2.5 & <=2.5	Pass
			-20	NV	-17.20	-0.0047	>=-2.5 & <=2.5	Pass
			-10	NV	-3.60	-0.0010	>=-2.5 & <=2.5	Pass
			0	NV	8.20	0.0023	>=-2.5 & <=2.5	Pass
			10	NV	-6.90	-0.0019	>=-2.5 & <=2.5	Pass
			20	NV	-5.90	-0.0016	>=-2.5 & <=2.5	Pass
			30	NV	-7.10	-0.0020	>=-2.5 & <=2.5	Pass
			40	NV	-9.40	-0.0026	>=-2.5 & <=2.5	Pass
CP-OFDM 16 QAM	3624.99	Outer_Full	20	LV	-3.20	-0.0009	>=-2.5 & <=2.5	Pass
				HV	-12.00	-0.0033	>=-2.5 & <=2.5	Pass
			-30	NV	-6.90	-0.0019	>=-2.5 & <=2.5	Pass
			-20	NV	5.60	0.0015	>=-2.5 & <=2.5	Pass
			-10	NV	2.10	0.0006	>=-2.5 & <=2.5	Pass
			0	NV	4.40	0.0012	>=-2.5 & <=2.5	Pass
			10	NV	1.00	0.0003	>=-2.5 & <=2.5	Pass
			20	NV	-4.20	-0.0012	>=-2.5 & <=2.5	Pass
			30	NV	4.70	0.0013	>=-2.5 & <=2.5	Pass
			40	NV	3.80	0.0010	>=-2.5 & <=2.5	Pass
CP-OFDM 64 QAM	3624.99	Outer_Full	20	LV	-16.10	-0.0044	>=-2.5 & <=2.5	Pass
				HV	-4.80	-0.0013	>=-2.5 & <=2.5	Pass
			-30	NV	10.20	0.0028	>=-2.5 & <=2.5	Pass
			-20	NV	-10.00	-0.0028	>=-2.5 & <=2.5	Pass
			-10	NV	-8.50	-0.0023	>=-2.5 & <=2.5	Pass
			0	NV	-10.70	-0.0030	>=-2.5 & <=2.5	Pass
			10	NV	-8.20	-0.0023	>=-2.5 & <=2.5	Pass
			20	NV	-15.00	-0.0041	>=-2.5 & <=2.5	Pass
			30	NV	1.70	0.0005	>=-2.5 & <=2.5	Pass
			40	NV	-8.10	-0.0022	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	-4.30	-0.0012	>=-2.5 & <=2.5	Pass
				HV	8.50	0.0023	>=-2.5 & <=2.5	Pass
			-30	NV	1.80	0.0005	>=-2.5 & <=2.5	Pass
			-20	NV	-4.60	-0.0013	>=-2.5 & <=2.5	Pass
			-10	NV	3.40	0.0009	>=-2.5 & <=2.5	Pass
			0	NV	-5.10	-0.0014	>=-2.5 & <=2.5	Pass
			10	NV	-18.80	-0.0052	>=-2.5 & <=2.5	Pass
			20	NV	-7.50	-0.0021	>=-2.5 & <=2.5	Pass
			30	NV	8.00	0.0022	>=-2.5 & <=2.5	Pass
			40	NV	-3.80	-0.0010	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	-4.30	-0.0012	>=-2.5 & <=2.5	Pass
				HV	8.50	0.0023	>=-2.5 & <=2.5	Pass
			-30	NV	1.80	0.0005	>=-2.5 & <=2.5	Pass
			-20	NV	-4.60	-0.0013	>=-2.5 & <=2.5	Pass
			-10	NV	3.40	0.0009	>=-2.5 & <=2.5	Pass
			0	NV	-5.10	-0.0014	>=-2.5 & <=2.5	Pass
			10	NV	-18.80	-0.0052	>=-2.5 & <=2.5	Pass
			20	NV	-7.50	-0.0021	>=-2.5 & <=2.5	Pass
			30	NV	8.00	0.0022	>=-2.5 & <=2.5	Pass
			40	NV	-3.80	-0.0010	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	-4.30	-0.0012	>=-2.5 & <=2.5	Pass
				HV	8.50	0.0023	>=-2.5 & <=2.5	Pass
			-30	NV	1.80	0.0005	>=-2.5 & <=2.5	Pass
			-20	NV	-4.60	-0.0013	>=-2.5 & <=2.5	Pass
			-10	NV	3.40	0.0009	>=-2.5 & <=2.5	Pass
			0	NV	-5.10	-0.0014	>=-2.5 & <=2.5	Pass
			10	NV	-18.80	-0.0052	>=-2.5 & <=2.5	Pass
			20	NV	-7.50	-0.0021	>=-2.5 & <=2.5	Pass
			30	NV	8.00	0.0022	>=-2.5 & <=2.5	Pass
			40	NV	-3.80	-0.0010	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	-4.30	-0.0012	>=-2.5 & <=2.5	Pass
				HV	8.50	0.0023	>=-2.5 & <=2.5	Pass
			-30	NV	1.80	0.0005	>=-2.5 & <=2.5	Pass
			-20	NV	-4.60	-0.0013	>=-2.5 & <=2.5	Pass
			-10	NV	3.40	0.0009	>=-2.5 & <=2.5	Pass
			0	NV	-5.10	-0.0014	>=-2.5 & <=2.5	Pass
			10	NV	-18.80	-0.0052	>=-2.5 & <=2.5	Pass
			20	NV	-7.50	-0.0021	>=-2.5 & <=2.5	Pass
			30	NV	8.00	0.0022	>=-2.5 & <=2.5	Pass
			40	NV	-3.80	-0.0010	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	-4.30	-0.0012	>=-2.5 & <=2.5	Pass
				HV	8.50	0.0023	>=-2.5 & <=2.5	Pass
			-30	NV	1.80	0.0005	>=-2.5 & <=2.5	Pass
			-20	NV	-4.60	-0.0013	>=-2.5 & <=2.5	Pass
			-10	NV	3.40	0.0009	>=-2.5 & <=2.5	Pass
			0	NV	-5.10	-0.0014	>=-2.5 & <=2.5	Pass
			10	NV	-18.80	-0.0052	>=-2.5 & <=2.5	Pass
			20	NV	-7.50	-0.0021	>=-2.5 & <=2.5	Pass
			30	NV	8.00	0.0022	>=-2.5 & <=2.5	Pass
			40	NV	-3.80	-0.0010	>=-2.5 & <=2.5	Pass



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中国·江苏·昆山市留学院创业园伟业路10号 邮编 215300

t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

3.3 30k_MIMO_20MHz

3.3.1 Test Result

5G NR n78d SCS=30kHz MIMO 20MHz								
Modulation	Frequency (MHz)	RB Allocation	Temp. (°C)	Volt.	Freq. Error (Hz)	Freq. vs. rated (ppm)		Verdict
						Result	Limit	
CP-OFDM QPSK	3624.99	Outer_Full	20	LV	-7.80	-0.0022	>=-2.5 & <=2.5	Pass
				HV	-11.60	-0.0032	>=-2.5 & <=2.5	Pass
			-30	NV	-3.60	-0.0010	>=-2.5 & <=2.5	Pass
			-20	NV	-4.30	-0.0012	>=-2.5 & <=2.5	Pass
			-10	NV	2.80	0.0008	>=-2.5 & <=2.5	Pass
			0	NV	-9.80	-0.0027	>=-2.5 & <=2.5	Pass
			10	NV	-3.70	-0.0010	>=-2.5 & <=2.5	Pass
			20	NV	-7.30	-0.0020	>=-2.5 & <=2.5	Pass
			30	NV	-11.30	-0.0031	>=-2.5 & <=2.5	Pass
			40	NV	-7.00	-0.0019	>=-2.5 & <=2.5	Pass
CP-OFDM 16 QAM	3624.99	Outer_Full	20	LV	-10.00	-0.0028	>=-2.5 & <=2.5	Pass
				HV	-9.30	-0.0026	>=-2.5 & <=2.5	Pass
			-30	NV	14.00	0.0039	>=-2.5 & <=2.5	Pass
			-20	NV	-4.20	-0.0012	>=-2.5 & <=2.5	Pass
			-10	NV	2.50	0.0007	>=-2.5 & <=2.5	Pass
			0	NV	4.60	0.0013	>=-2.5 & <=2.5	Pass
			10	NV	-4.90	-0.0014	>=-2.5 & <=2.5	Pass
			20	NV	-7.90	-0.0022	>=-2.5 & <=2.5	Pass
			30	NV	-3.60	-0.0010	>=-2.5 & <=2.5	Pass
			40	NV	-9.10	-0.0025	>=-2.5 & <=2.5	Pass
CP-OFDM 64 QAM	3624.99	Outer_Full	20	LV	-7.30	-0.0020	>=-2.5 & <=2.5	Pass
				HV	-6.30	-0.0017	>=-2.5 & <=2.5	Pass
			-30	NV	10.00	0.0028	>=-2.5 & <=2.5	Pass
			-20	NV	3.80	0.0010	>=-2.5 & <=2.5	Pass
			-10	NV	-10.60	-0.0029	>=-2.5 & <=2.5	Pass
			0	NV	-7.20	-0.0020	>=-2.5 & <=2.5	Pass
			10	NV	-11.60	-0.0032	>=-2.5 & <=2.5	Pass
			20	NV	-7.20	-0.0020	>=-2.5 & <=2.5	Pass
			30	NV	15.20	0.0042	>=-2.5 & <=2.5	Pass
			40	NV	5.00	0.0014	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	5.70	0.0016	>=-2.5 & <=2.5	Pass
				HV	-2.90	-0.0008	>=-2.5 & <=2.5	Pass
			-30	NV	-3.10	-0.0009	>=-2.5 & <=2.5	Pass
			-20	NV	9.60	0.0026	>=-2.5 & <=2.5	Pass
			-10	NV	-9.60	-0.0026	>=-2.5 & <=2.5	Pass
			0	NV	-5.70	-0.0016	>=-2.5 & <=2.5	Pass
			10	NV	-3.50	-0.0010	>=-2.5 & <=2.5	Pass
			20	NV	-1.50	-0.0004	>=-2.5 & <=2.5	Pass
			30	NV	6.50	0.0018	>=-2.5 & <=2.5	Pass
			40	NV	-17.00	-0.0047	>=-2.5 & <=2.5	Pass
			50	NV	13.50	0.0037	>=-2.5 & <=2.5	Pass



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t(86-512)57355888 f(86-512)57370818 www.sgsgroup.com.cn
t(86-512)57355888 f(86-512)57370818 sgs.china@sgs.com

3.4 30k_MIMO_30MHz

3.4.1 Test Result

5G NR n78d SCS=30kHz MIMO 30MHz								
Modulation	Frequency (MHz)	RB Allocation	Temp. (°C)	Volt.	Freq. Error (Hz)	Freq. vs. rated (ppm)		Verdict
						Result	Limit	
CP-OFDM QPSK	3624.99	Outer_Full	20	LV	-8.80	-0.0024	>=-2.5 & <=2.5	Pass
				HV	-6.50	-0.0018	>=-2.5 & <=2.5	Pass
			-30	NV	-5.30	-0.0015	>=-2.5 & <=2.5	Pass
			-20	NV	15.90	0.0044	>=-2.5 & <=2.5	Pass
			-10	NV	3.60	0.0010	>=-2.5 & <=2.5	Pass
			0	NV	-6.20	-0.0017	>=-2.5 & <=2.5	Pass
			10	NV	-1.70	-0.0005	>=-2.5 & <=2.5	Pass
			20	NV	9.80	0.0027	>=-2.5 & <=2.5	Pass
			30	NV	-4.10	-0.0011	>=-2.5 & <=2.5	Pass
			40	NV	-11.80	-0.0033	>=-2.5 & <=2.5	Pass
CP-OFDM 16 QAM	3624.99	Outer_Full	20	LV	-3.90	-0.0011	>=-2.5 & <=2.5	Pass
				HV	-4.10	-0.0011	>=-2.5 & <=2.5	Pass
			-30	NV	5.90	0.0016	>=-2.5 & <=2.5	Pass
			-20	NV	5.30	0.0015	>=-2.5 & <=2.5	Pass
			-10	NV	4.90	0.0014	>=-2.5 & <=2.5	Pass
			0	NV	-3.50	-0.0010	>=-2.5 & <=2.5	Pass
			10	NV	4.00	0.0011	>=-2.5 & <=2.5	Pass
			20	NV	-6.40	-0.0018	>=-2.5 & <=2.5	Pass
			30	NV	-3.40	-0.0009	>=-2.5 & <=2.5	Pass
			40	NV	3.40	0.0009	>=-2.5 & <=2.5	Pass
CP-OFDM 64 QAM	3624.99	Outer_Full	20	LV	-5.70	-0.0016	>=-2.5 & <=2.5	Pass
				HV	3.60	0.0010	>=-2.5 & <=2.5	Pass
			-30	NV	-5.40	-0.0015	>=-2.5 & <=2.5	Pass
			-20	NV	-9.30	-0.0026	>=-2.5 & <=2.5	Pass
			-10	NV	-8.20	-0.0023	>=-2.5 & <=2.5	Pass
			0	NV	-6.20	-0.0017	>=-2.5 & <=2.5	Pass
			10	NV	-17.50	-0.0048	>=-2.5 & <=2.5	Pass
			20	NV	-12.90	-0.0036	>=-2.5 & <=2.5	Pass
			30	NV	3.90	0.0011	>=-2.5 & <=2.5	Pass
			40	NV	-4.10	-0.0011	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	-3.70	-0.0010	>=-2.5 & <=2.5	Pass
				HV	3.80	0.0010	>=-2.5 & <=2.5	Pass
			-30	NV	3.30	0.0009	>=-2.5 & <=2.5	Pass
			-20	NV	-7.60	-0.0021	>=-2.5 & <=2.5	Pass
			-10	NV	-11.80	-0.0033	>=-2.5 & <=2.5	Pass
			0	NV	-3.00	-0.0008	>=-2.5 & <=2.5	Pass
			10	NV	3.90	0.0011	>=-2.5 & <=2.5	Pass
			20	NV	-11.60	-0.0032	>=-2.5 & <=2.5	Pass
			30	NV	-8.30	-0.0023	>=-2.5 & <=2.5	Pass
			40	NV	-7.70	-0.0021	>=-2.5 & <=2.5	Pass
			50	NV	3.90	0.0011	>=-2.5 & <=2.5	Pass



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3.5 30k_MIMO_40MHz

3.5.1 Test Result

5G NR n78d SCS=30kHz MIMO 40MHz								
Modulation	Frequency (MHz)	RB Allocation	Temp. (°C)	Volt.	Freq. Error (Hz)	Freq. vs. rated (ppm)		Verdict
						Result	Limit	
CP-OFDM QPSK	3624.99	Outer_Full	20	LV	-8.30	-0.0023	>=-2.5 & <=2.5	Pass
				HV	8.00	0.0022	>=-2.5 & <=2.5	Pass
			-30	NV	-11.60	-0.0032	>=-2.5 & <=2.5	Pass
			-20	NV	11.90	0.0033	>=-2.5 & <=2.5	Pass
			-10	NV	5.60	0.0015	>=-2.5 & <=2.5	Pass
			0	NV	-10.50	-0.0029	>=-2.5 & <=2.5	Pass
			10	NV	11.30	0.0031	>=-2.5 & <=2.5	Pass
			20	NV	6.80	0.0019	>=-2.5 & <=2.5	Pass
			30	NV	-10.60	-0.0029	>=-2.5 & <=2.5	Pass
			40	NV	-20.60	-0.0057	>=-2.5 & <=2.5	Pass
CP-OFDM 16 QAM	3624.99	Outer_Full	20	LV	-6.40	-0.0018	>=-2.5 & <=2.5	Pass
				HV	17.80	0.0049	>=-2.5 & <=2.5	Pass
			-30	NV	3.70	0.0010	>=-2.5 & <=2.5	Pass
			-20	NV	-2.50	-0.0007	>=-2.5 & <=2.5	Pass
			-10	NV	-6.60	-0.0018	>=-2.5 & <=2.5	Pass
			0	NV	-5.90	-0.0016	>=-2.5 & <=2.5	Pass
			10	NV	14.70	0.0041	>=-2.5 & <=2.5	Pass
			20	NV	10.10	0.0028	>=-2.5 & <=2.5	Pass
			30	NV	-10.10	-0.0028	>=-2.5 & <=2.5	Pass
			40	NV	2.80	0.0008	>=-2.5 & <=2.5	Pass
CP-OFDM 64 QAM	3624.99	Outer_Full	20	LV	-7.40	-0.0020	>=-2.5 & <=2.5	Pass
				HV	8.30	0.0023	>=-2.5 & <=2.5	Pass
			-30	NV	7.20	0.0020	>=-2.5 & <=2.5	Pass
			-20	NV	-2.50	-0.0007	>=-2.5 & <=2.5	Pass
			-10	NV	2.70	0.0007	>=-2.5 & <=2.5	Pass
			0	NV	-2.60	-0.0007	>=-2.5 & <=2.5	Pass
			10	NV	9.30	0.0026	>=-2.5 & <=2.5	Pass
			20	NV	8.80	0.0024	>=-2.5 & <=2.5	Pass
			30	NV	2.20	0.0006	>=-2.5 & <=2.5	Pass
			40	NV	-1.30	-0.0004	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	8.20	0.0023	>=-2.5 & <=2.5	Pass
				HV	-8.70	-0.0024	>=-2.5 & <=2.5	Pass
			-30	NV	-1.80	-0.0005	>=-2.5 & <=2.5	Pass
			-20	NV	4.10	0.0011	>=-2.5 & <=2.5	Pass
			-10	NV	-8.90	-0.0025	>=-2.5 & <=2.5	Pass
			0	NV	-9.80	-0.0027	>=-2.5 & <=2.5	Pass
			10	NV	-1.00	-0.0003	>=-2.5 & <=2.5	Pass
			20	NV	-3.70	-0.0010	>=-2.5 & <=2.5	Pass
			30	NV	-6.60	-0.0018	>=-2.5 & <=2.5	Pass
			40	NV	-5.50	-0.0015	>=-2.5 & <=2.5	Pass
			50	NV	-9.30	-0.0026	>=-2.5 & <=2.5	Pass



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3.6 30k_MIMO_50MHz

3.6.1 Test Result

5G NR n78d SCS=30kHz MIMO 50MHz								
Modulation	Frequency (MHz)	RB Allocation	Temp. (°C)	Volt.	Freq. Error (Hz)	Freq. vs. rated (ppm)		Verdict
						Result	Limit	
CP-OFDM QPSK	3624.99	Outer_Full	20	LV	-6.80	-0.0019	>=-2.5 & <=2.5	Pass
				HV	2.80	0.0008	>=-2.5 & <=2.5	Pass
			-30	NV	4.90	0.0014	>=-2.5 & <=2.5	Pass
			-20	NV	-2.70	-0.0007	>=-2.5 & <=2.5	Pass
			-10	NV	6.40	0.0018	>=-2.5 & <=2.5	Pass
			0	NV	-10.90	-0.0030	>=-2.5 & <=2.5	Pass
			10	NV	4.70	0.0013	>=-2.5 & <=2.5	Pass
			20	NV	5.90	0.0016	>=-2.5 & <=2.5	Pass
			30	NV	-7.60	-0.0021	>=-2.5 & <=2.5	Pass
			40	NV	-3.20	-0.0009	>=-2.5 & <=2.5	Pass
CP-OFDM 16 QAM	3624.99	Outer_Full	20	LV	-8.20	-0.0023	>=-2.5 & <=2.5	Pass
				HV	7.40	0.0020	>=-2.5 & <=2.5	Pass
			-30	NV	9.00	0.0025	>=-2.5 & <=2.5	Pass
			-20	NV	8.20	0.0023	>=-2.5 & <=2.5	Pass
			-10	NV	13.60	0.0038	>=-2.5 & <=2.5	Pass
			0	NV	17.30	0.0048	>=-2.5 & <=2.5	Pass
			10	NV	8.50	0.0023	>=-2.5 & <=2.5	Pass
			20	NV	2.90	0.0008	>=-2.5 & <=2.5	Pass
			30	NV	10.90	0.0030	>=-2.5 & <=2.5	Pass
			40	NV	7.60	0.0021	>=-2.5 & <=2.5	Pass
CP-OFDM 64 QAM	3624.99	Outer_Full	20	LV	-6.90	-0.0019	>=-2.5 & <=2.5	Pass
				HV	5.50	0.0015	>=-2.5 & <=2.5	Pass
			-30	NV	-9.70	-0.0027	>=-2.5 & <=2.5	Pass
			-20	NV	-5.40	-0.0015	>=-2.5 & <=2.5	Pass
			-10	NV	18.20	0.0050	>=-2.5 & <=2.5	Pass
			0	NV	12.30	0.0034	>=-2.5 & <=2.5	Pass
			10	NV	5.50	0.0015	>=-2.5 & <=2.5	Pass
			20	NV	7.10	0.0020	>=-2.5 & <=2.5	Pass
			30	NV	10.90	0.0030	>=-2.5 & <=2.5	Pass
			40	NV	-8.60	-0.0024	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	0.40	0.0001	>=-2.5 & <=2.5	Pass
				HV	2.50	0.0007	>=-2.5 & <=2.5	Pass
			-30	NV	15.80	0.0044	>=-2.5 & <=2.5	Pass
			-20	NV	-1.90	-0.0005	>=-2.5 & <=2.5	Pass
			-10	NV	6.50	0.0018	>=-2.5 & <=2.5	Pass
			0	NV	-8.50	-0.0023	>=-2.5 & <=2.5	Pass
			10	NV	-4.10	-0.0011	>=-2.5 & <=2.5	Pass
			20	NV	-4.20	-0.0012	>=-2.5 & <=2.5	Pass
			30	NV	-4.10	-0.0011	>=-2.5 & <=2.5	Pass
			40	NV	-4.40	-0.0012	>=-2.5 & <=2.5	Pass
			50	NV	-2.60	-0.0007	>=-2.5 & <=2.5	Pass



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3.7 30k_MIMO_60MHz

3.7.1 Test Result

5G NR n78d SCS=30kHz MIMO 60MHz								
Modulation	Frequency (MHz)	RB Allocation	Temp. (°C)	Volt.	Freq. Error (Hz)	Freq. vs. rated (ppm)		Verdict
						Result	Limit	
CP-OFDM QPSK	3624.99	Outer_Full	20	LV	-5.80	-0.0016	>=-2.5 & <=2.5	Pass
				HV	4.60	0.0013	>=-2.5 & <=2.5	Pass
			-30	NV	-9.00	-0.0025	>=-2.5 & <=2.5	Pass
			-20	NV	-7.90	-0.0022	>=-2.5 & <=2.5	Pass
			-10	NV	8.60	0.0024	>=-2.5 & <=2.5	Pass
			0	NV	2.50	0.0007	>=-2.5 & <=2.5	Pass
			10	NV	4.10	0.0011	>=-2.5 & <=2.5	Pass
			20	NV	-6.70	-0.0018	>=-2.5 & <=2.5	Pass
			30	NV	-7.30	-0.0020	>=-2.5 & <=2.5	Pass
			40	NV	-10.50	-0.0029	>=-2.5 & <=2.5	Pass
CP-OFDM 16 QAM	3624.99	Outer_Full	20	LV	3.50	0.0010	>=-2.5 & <=2.5	Pass
				HV	-2.10	-0.0006	>=-2.5 & <=2.5	Pass
			-30	NV	-10.10	-0.0028	>=-2.5 & <=2.5	Pass
			-20	NV	11.40	0.0031	>=-2.5 & <=2.5	Pass
			-10	NV	-1.70	-0.0005	>=-2.5 & <=2.5	Pass
			0	NV	-7.30	-0.0020	>=-2.5 & <=2.5	Pass
			10	NV	-9.40	-0.0026	>=-2.5 & <=2.5	Pass
			20	NV	-8.20	-0.0023	>=-2.5 & <=2.5	Pass
			30	NV	11.20	0.0031	>=-2.5 & <=2.5	Pass
			40	NV	-11.10	-0.0031	>=-2.5 & <=2.5	Pass
CP-OFDM 64 QAM	3624.99	Outer_Full	20	LV	-7.80	-0.0022	>=-2.5 & <=2.5	Pass
				HV	-2.40	-0.0007	>=-2.5 & <=2.5	Pass
			-30	NV	-7.50	-0.0021	>=-2.5 & <=2.5	Pass
			-20	NV	-3.70	-0.0010	>=-2.5 & <=2.5	Pass
			-10	NV	8.70	0.0024	>=-2.5 & <=2.5	Pass
			0	NV	3.90	0.0011	>=-2.5 & <=2.5	Pass
			10	NV	3.50	0.0010	>=-2.5 & <=2.5	Pass
			20	NV	-4.00	-0.0011	>=-2.5 & <=2.5	Pass
			30	NV	1.30	0.0004	>=-2.5 & <=2.5	Pass
			40	NV	-13.90	-0.0038	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	-5.00	-0.0014	>=-2.5 & <=2.5	Pass
				HV	-8.20	-0.0023	>=-2.5 & <=2.5	Pass
			-30	NV	-9.00	-0.0025	>=-2.5 & <=2.5	Pass
			-20	NV	-8.60	-0.0024	>=-2.5 & <=2.5	Pass
			-10	NV	6.70	0.0018	>=-2.5 & <=2.5	Pass
			0	NV	-1.00	-0.0003	>=-2.5 & <=2.5	Pass
			10	NV	4.00	0.0011	>=-2.5 & <=2.5	Pass
			20	NV	-4.90	-0.0014	>=-2.5 & <=2.5	Pass
			30	NV	-6.90	-0.0019	>=-2.5 & <=2.5	Pass
			40	NV	10.00	0.0028	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	-5.00	-0.0014	>=-2.5 & <=2.5	Pass
				HV	-8.20	-0.0023	>=-2.5 & <=2.5	Pass
			-30	NV	-9.00	-0.0025	>=-2.5 & <=2.5	Pass
			-20	NV	-8.60	-0.0024	>=-2.5 & <=2.5	Pass
			-10	NV	6.70	0.0018	>=-2.5 & <=2.5	Pass
			0	NV	-1.00	-0.0003	>=-2.5 & <=2.5	Pass
			10	NV	4.00	0.0011	>=-2.5 & <=2.5	Pass
			20	NV	-4.90	-0.0014	>=-2.5 & <=2.5	Pass
			30	NV	-6.90	-0.0019	>=-2.5 & <=2.5	Pass
			40	NV	10.00	0.0028	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	-5.00	-0.0014	>=-2.5 & <=2.5	Pass
				HV	-8.20	-0.0023	>=-2.5 & <=2.5	Pass
			-30	NV	-9.00	-0.0025	>=-2.5 & <=2.5	Pass
			-20	NV	-8.60	-0.0024	>=-2.5 & <=2.5	Pass
			-10	NV	6.70	0.0018	>=-2.5 & <=2.5	Pass
			0	NV	-1.00	-0.0003	>=-2.5 & <=2.5	Pass
			10	NV	4.00	0.0011	>=-2.5 & <=2.5	Pass
			20	NV	-4.90	-0.0014	>=-2.5 & <=2.5	Pass
			30	NV	-6.90	-0.0019	>=-2.5 & <=2.5	Pass
			40	NV	10.00	0.0028	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	-5.00	-0.0014	>=-2.5 & <=2.5	Pass
				HV	-8.20	-0.0023	>=-2.5 & <=2.5	Pass
			-30	NV	-9.00	-0.0025	>=-2.5 & <=2.5	Pass
			-20	NV	-8.60	-0.0024	>=-2.5 & <=2.5	Pass
			-10	NV	6.70	0.0018	>=-2.5 & <=2.5	Pass
			0	NV	-1.00	-0.0003	>=-2.5 & <=2.5	Pass
			10	NV	4.00	0.0011	>=-2.5 & <=2.5	Pass
			20	NV	-4.90	-0.0014	>=-2.5 & <=2.5	Pass
			30	NV	-6.90	-0.0019	>=-2.5 & <=2.5	Pass
			40	NV	10.00	0.0028	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	-5.00	-0.0014	>=-2.5 & <=2.5	Pass
				HV	-8.20	-0.0023	>=-2.5 & <=2.5	Pass
			-30	NV	-9.00	-0.0025	>=-2.5 & <=2.5	Pass
			-20	NV	-8.60	-0.0024	>=-2.5 & <=2.5	Pass
			-10	NV	6.70	0.0018	>=-2.5 & <=2.5	Pass
			0	NV	-1.00	-0.0003	>=-2.5 & <=2.5	Pass
			10	NV	4.00	0.0011	>=-2.5 & <=2.5	Pass
			20	NV	-4.90	-0.0014	>=-2.5 & <=2.5	Pass
			30	NV	-6.90	-0.0019	>=-2.5 & <=2.5	Pass
			40	NV	10.00	0.0028	>=-2.5 & <=2.5	Pass



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3.8 30k_MIMO_70MHz

3.8.1 Test Result

5G NR n78d SCS=30kHz MIMO 70MHz								
Modulation	Frequency (MHz)	RB Allocation	Temp. (°C)	Volt.	Freq. Error (Hz)	Freq. vs. rated (ppm)		Verdict
						Result	Limit	
CP-OFDM QPSK	3624.99	Outer_Full	20	LV	6.00	0.0017	>=-2.5 & <=2.5	Pass
				HV	-5.00	-0.0014	>=-2.5 & <=2.5	Pass
			-30	NV	10.10	0.0028	>=-2.5 & <=2.5	Pass
			-20	NV	-12.50	-0.0034	>=-2.5 & <=2.5	Pass
			-10	NV	4.70	0.0013	>=-2.5 & <=2.5	Pass
			0	NV	-11.50	-0.0032	>=-2.5 & <=2.5	Pass
			10	NV	-2.40	-0.0007	>=-2.5 & <=2.5	Pass
			20	NV	-10.20	-0.0028	>=-2.5 & <=2.5	Pass
			30	NV	6.40	0.0018	>=-2.5 & <=2.5	Pass
			40	NV	2.10	0.0006	>=-2.5 & <=2.5	Pass
CP-OFDM 16 QAM	3624.99	Outer_Full	20	LV	-5.30	-0.0015	>=-2.5 & <=2.5	Pass
				HV	8.70	0.0024	>=-2.5 & <=2.5	Pass
			-30	NV	-5.30	-0.0015	>=-2.5 & <=2.5	Pass
			-20	NV	-0.90	-0.0002	>=-2.5 & <=2.5	Pass
			-10	NV	7.40	0.0020	>=-2.5 & <=2.5	Pass
			0	NV	11.40	0.0031	>=-2.5 & <=2.5	Pass
			10	NV	-9.90	-0.0027	>=-2.5 & <=2.5	Pass
			20	NV	-3.00	-0.0008	>=-2.5 & <=2.5	Pass
			30	NV	2.40	0.0007	>=-2.5 & <=2.5	Pass
			40	NV	1.80	0.0005	>=-2.5 & <=2.5	Pass
CP-OFDM 64 QAM	3624.99	Outer_Full	20	LV	-9.80	-0.0027	>=-2.5 & <=2.5	Pass
				HV	11.70	0.0032	>=-2.5 & <=2.5	Pass
			-30	NV	-3.50	-0.0010	>=-2.5 & <=2.5	Pass
			-20	NV	-6.50	-0.0018	>=-2.5 & <=2.5	Pass
			-10	NV	-3.30	-0.0009	>=-2.5 & <=2.5	Pass
			0	NV	4.70	0.0013	>=-2.5 & <=2.5	Pass
			10	NV	8.50	0.0023	>=-2.5 & <=2.5	Pass
			20	NV	4.90	0.0014	>=-2.5 & <=2.5	Pass
			30	NV	-6.40	-0.0018	>=-2.5 & <=2.5	Pass
			40	NV	3.60	0.0010	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	-7.40	-0.0020	>=-2.5 & <=2.5	Pass
				HV	-2.70	-0.0007	>=-2.5 & <=2.5	Pass
			-30	NV	-18.60	-0.0051	>=-2.5 & <=2.5	Pass
			-20	NV	-4.90	-0.0014	>=-2.5 & <=2.5	Pass
			-10	NV	-5.20	-0.0014	>=-2.5 & <=2.5	Pass
			0	NV	-5.10	-0.0014	>=-2.5 & <=2.5	Pass
			10	NV	-6.40	-0.0018	>=-2.5 & <=2.5	Pass
			20	NV	-6.30	-0.0017	>=-2.5 & <=2.5	Pass
			30	NV	9.00	0.0025	>=-2.5 & <=2.5	Pass
			40	NV	16.00	0.0044	>=-2.5 & <=2.5	Pass
			50	NV	-6.40	-0.0018	>=-2.5 & <=2.5	Pass



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3.9 30k_MIMO_80MHz

3.9.1 Test Result

5G NR n78d SCS=30kHz MIMO 80MHz								
Modulation	Frequency (MHz)	RB Allocation	Temp. (°C)	Volt.	Freq. Error (Hz)	Freq. vs. rated (ppm)		Verdict
						Result	Limit	
CP-OFDM QPSK	3624.99	Outer_Full	20	LV	-8.40	-0.0023	>=-2.5 & <=2.5	Pass
				HV	14.70	0.0041	>=-2.5 & <=2.5	Pass
			-30	NV	6.20	0.0017	>=-2.5 & <=2.5	Pass
			-20	NV	6.20	0.0017	>=-2.5 & <=2.5	Pass
			-10	NV	1.90	0.0005	>=-2.5 & <=2.5	Pass
			0	NV	1.80	0.0005	>=-2.5 & <=2.5	Pass
			10	NV	-3.60	-0.0010	>=-2.5 & <=2.5	Pass
			20	NV	-2.70	-0.0007	>=-2.5 & <=2.5	Pass
			30	NV	6.30	0.0017	>=-2.5 & <=2.5	Pass
			40	NV	6.90	0.0019	>=-2.5 & <=2.5	Pass
CP-OFDM 16 QAM	3624.99	Outer_Full	20	LV	-3.90	-0.0011	>=-2.5 & <=2.5	Pass
				HV	8.80	0.0024	>=-2.5 & <=2.5	Pass
			-30	NV	-12.90	-0.0036	>=-2.5 & <=2.5	Pass
			-20	NV	-6.30	-0.0017	>=-2.5 & <=2.5	Pass
			-10	NV	-9.40	-0.0026	>=-2.5 & <=2.5	Pass
			0	NV	4.30	0.0012	>=-2.5 & <=2.5	Pass
			10	NV	1.10	0.0003	>=-2.5 & <=2.5	Pass
			20	NV	11.30	0.0031	>=-2.5 & <=2.5	Pass
			30	NV	6.50	0.0018	>=-2.5 & <=2.5	Pass
			40	NV	-3.00	-0.0008	>=-2.5 & <=2.5	Pass
CP-OFDM 64 QAM	3624.99	Outer_Full	20	LV	-9.70	-0.0027	>=-2.5 & <=2.5	Pass
				HV	-13.00	-0.0036	>=-2.5 & <=2.5	Pass
			-30	NV	-1.60	-0.0004	>=-2.5 & <=2.5	Pass
			-20	NV	6.40	0.0018	>=-2.5 & <=2.5	Pass
			-10	NV	-14.20	-0.0039	>=-2.5 & <=2.5	Pass
			0	NV	-10.30	-0.0028	>=-2.5 & <=2.5	Pass
			10	NV	15.50	0.0043	>=-2.5 & <=2.5	Pass
			20	NV	-7.50	-0.0021	>=-2.5 & <=2.5	Pass
			30	NV	8.90	0.0025	>=-2.5 & <=2.5	Pass
			40	NV	10.20	0.0028	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	12.60	0.0035	>=-2.5 & <=2.5	Pass
				HV	8.70	0.0024	>=-2.5 & <=2.5	Pass
			-30	NV	4.00	0.0011	>=-2.5 & <=2.5	Pass
			-20	NV	-3.20	-0.0009	>=-2.5 & <=2.5	Pass
			-10	NV	8.00	0.0022	>=-2.5 & <=2.5	Pass
			0	NV	-5.80	-0.0016	>=-2.5 & <=2.5	Pass
			10	NV	11.60	0.0032	>=-2.5 & <=2.5	Pass
			20	NV	5.20	0.0014	>=-2.5 & <=2.5	Pass
			30	NV	-16.20	-0.0045	>=-2.5 & <=2.5	Pass
			40	NV	-5.20	-0.0014	>=-2.5 & <=2.5	Pass
			50	NV	4.30	0.0012	>=-2.5 & <=2.5	Pass



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3.10 30k_MIMO_90MHz

3.10.1 Test Result

5G NR n78d SCS=30kHz MIMO 90MHz								
Modulation	Frequency (MHz)	RB Allocation	Temp. (°C)	Volt.	Freq. Error (Hz)	Freq. vs. rated (ppm)		Verdict
						Result	Limit	
CP-OFDM QPSK	3624.99	Outer_Full	20	LV	11.90	0.0033	>=-2.5 & <=2.5	Pass
				HV	-3.40	-0.0009	>=-2.5 & <=2.5	Pass
			-30	NV	-12.50	-0.0034	>=-2.5 & <=2.5	Pass
			-20	NV	-7.40	-0.0020	>=-2.5 & <=2.5	Pass
			-10	NV	10.50	0.0029	>=-2.5 & <=2.5	Pass
			0	NV	-9.50	-0.0026	>=-2.5 & <=2.5	Pass
			10	NV	10.80	0.0030	>=-2.5 & <=2.5	Pass
			20	NV	-13.80	-0.0038	>=-2.5 & <=2.5	Pass
			30	NV	-7.10	-0.0020	>=-2.5 & <=2.5	Pass
			40	NV	18.80	0.0052	>=-2.5 & <=2.5	Pass
CP-OFDM 16 QAM	3624.99	Outer_Full	20	LV	12.90	0.0036	>=-2.5 & <=2.5	Pass
				HV	-3.50	-0.0010	>=-2.5 & <=2.5	Pass
			-30	NV	7.80	0.0022	>=-2.5 & <=2.5	Pass
			-20	NV	6.00	0.0017	>=-2.5 & <=2.5	Pass
			-10	NV	9.00	0.0025	>=-2.5 & <=2.5	Pass
			0	NV	1.60	0.0004	>=-2.5 & <=2.5	Pass
			10	NV	-8.20	-0.0023	>=-2.5 & <=2.5	Pass
			20	NV	3.10	0.0009	>=-2.5 & <=2.5	Pass
			30	NV	13.60	0.0038	>=-2.5 & <=2.5	Pass
			40	NV	-2.30	-0.0006	>=-2.5 & <=2.5	Pass
CP-OFDM 64 QAM	3624.99	Outer_Full	20	LV	9.60	0.0026	>=-2.5 & <=2.5	Pass
				HV	5.80	0.0016	>=-2.5 & <=2.5	Pass
			-30	NV	10.30	0.0028	>=-2.5 & <=2.5	Pass
			-20	NV	1.90	0.0005	>=-2.5 & <=2.5	Pass
			-10	NV	-4.90	-0.0014	>=-2.5 & <=2.5	Pass
			0	NV	-5.80	-0.0016	>=-2.5 & <=2.5	Pass
			10	NV	-3.50	-0.0010	>=-2.5 & <=2.5	Pass
			20	NV	-1.30	-0.0004	>=-2.5 & <=2.5	Pass
			30	NV	4.10	0.0011	>=-2.5 & <=2.5	Pass
			40	NV	6.70	0.0018	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	-4.60	-0.0013	>=-2.5 & <=2.5	Pass
				HV	16.70	0.0046	>=-2.5 & <=2.5	Pass
			-30	NV	7.60	0.0021	>=-2.5 & <=2.5	Pass
			-20	NV	12.60	0.0035	>=-2.5 & <=2.5	Pass
			-10	NV	-5.10	-0.0014	>=-2.5 & <=2.5	Pass
			0	NV	10.30	0.0028	>=-2.5 & <=2.5	Pass
			10	NV	9.20	0.0025	>=-2.5 & <=2.5	Pass
			20	NV	4.50	0.0012	>=-2.5 & <=2.5	Pass
			30	NV	5.00	0.0014	>=-2.5 & <=2.5	Pass
			40	NV	-11.00	-0.0030	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	50	NV	13.20	0.0036	>=-2.5 & <=2.5	Pass



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3.11 30k_MIMO_100MHz

3.11.1 Test Result

5G NR n78d SCS=30kHz MIMO 100MHz								
Modulation	Frequency (MHz)	RB Allocation	Temp. (°C)	Volt.	Freq. Error (Hz)	Freq. vs. rated (ppm)		Verdict
						Result	Limit	
CP-OFDM QPSK	3624.99	Outer_Full	20	LV	3.40	0.0009	>=-2.5 & <=2.5	Pass
				HV	-0.40	-0.0001	>=-2.5 & <=2.5	Pass
			-30	NV	3.80	0.0010	>=-2.5 & <=2.5	Pass
			-20	NV	9.80	0.0027	>=-2.5 & <=2.5	Pass
			-10	NV	-1.70	-0.0005	>=-2.5 & <=2.5	Pass
			0	NV	1.70	0.0005	>=-2.5 & <=2.5	Pass
			10	NV	7.70	0.0021	>=-2.5 & <=2.5	Pass
			20	NV	-10.10	-0.0028	>=-2.5 & <=2.5	Pass
			30	NV	-5.40	-0.0015	>=-2.5 & <=2.5	Pass
			40	NV	-5.90	-0.0016	>=-2.5 & <=2.5	Pass
CP-OFDM 16 QAM	3624.99	Outer_Full	20	LV	-4.80	-0.0013	>=-2.5 & <=2.5	Pass
				HV	-5.50	-0.0015	>=-2.5 & <=2.5	Pass
			-30	NV	13.50	0.0037	>=-2.5 & <=2.5	Pass
			-20	NV	7.60	0.0021	>=-2.5 & <=2.5	Pass
			-10	NV	-7.20	-0.0020	>=-2.5 & <=2.5	Pass
			0	NV	-8.50	-0.0023	>=-2.5 & <=2.5	Pass
			10	NV	11.90	0.0033	>=-2.5 & <=2.5	Pass
			20	NV	2.60	0.0007	>=-2.5 & <=2.5	Pass
			30	NV	-6.20	-0.0017	>=-2.5 & <=2.5	Pass
			40	NV	-2.90	-0.0008	>=-2.5 & <=2.5	Pass
CP-OFDM 64 QAM	3624.99	Outer_Full	20	LV	7.00	0.0019	>=-2.5 & <=2.5	Pass
				HV	-3.40	-0.0009	>=-2.5 & <=2.5	Pass
			-30	NV	-13.70	-0.0038	>=-2.5 & <=2.5	Pass
			-20	NV	3.80	0.0010	>=-2.5 & <=2.5	Pass
			-10	NV	6.80	0.0019	>=-2.5 & <=2.5	Pass
			0	NV	4.90	0.0014	>=-2.5 & <=2.5	Pass
			10	NV	-13.20	-0.0036	>=-2.5 & <=2.5	Pass
			20	NV	4.60	0.0013	>=-2.5 & <=2.5	Pass
			30	NV	6.00	0.0017	>=-2.5 & <=2.5	Pass
			40	NV	2.40	0.0007	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	17.80	0.0049	>=-2.5 & <=2.5	Pass
				HV	1.10	0.0003	>=-2.5 & <=2.5	Pass
			-30	NV	6.40	0.0018	>=-2.5 & <=2.5	Pass
			-20	NV	2.40	0.0007	>=-2.5 & <=2.5	Pass
			-10	NV	6.80	0.0019	>=-2.5 & <=2.5	Pass
			0	NV	8.80	0.0024	>=-2.5 & <=2.5	Pass
			10	NV	-1.30	-0.0004	>=-2.5 & <=2.5	Pass
			20	NV	14.00	0.0039	>=-2.5 & <=2.5	Pass
			30	NV	5.20	0.0014	>=-2.5 & <=2.5	Pass
			40	NV	-11.10	-0.0031	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	17.80	0.0049	>=-2.5 & <=2.5	Pass
				HV	1.10	0.0003	>=-2.5 & <=2.5	Pass
			-30	NV	6.40	0.0018	>=-2.5 & <=2.5	Pass
			-20	NV	2.40	0.0007	>=-2.5 & <=2.5	Pass
			-10	NV	6.80	0.0019	>=-2.5 & <=2.5	Pass
			0	NV	8.80	0.0024	>=-2.5 & <=2.5	Pass
			10	NV	-1.30	-0.0004	>=-2.5 & <=2.5	Pass
			20	NV	14.00	0.0039	>=-2.5 & <=2.5	Pass
			30	NV	5.20	0.0014	>=-2.5 & <=2.5	Pass
			40	NV	-11.10	-0.0031	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	17.80	0.0049	>=-2.5 & <=2.5	Pass
				HV	1.10	0.0003	>=-2.5 & <=2.5	Pass
			-30	NV	6.40	0.0018	>=-2.5 & <=2.5	Pass
			-20	NV	2.40	0.0007	>=-2.5 & <=2.5	Pass
			-10	NV	6.80	0.0019	>=-2.5 & <=2.5	Pass
			0	NV	8.80	0.0024	>=-2.5 & <=2.5	Pass
			10	NV	-1.30	-0.0004	>=-2.5 & <=2.5	Pass
			20	NV	14.00	0.0039	>=-2.5 & <=2.5	Pass
			30	NV	5.20	0.0014	>=-2.5 & <=2.5	Pass
			40	NV	-11.10	-0.0031	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	17.80	0.0049	>=-2.5 & <=2.5	Pass
				HV	1.10	0.0003	>=-2.5 & <=2.5	Pass
			-30	NV	6.40	0.0018	>=-2.5 & <=2.5	Pass
			-20	NV	2.40	0.0007	>=-2.5 & <=2.5	Pass
			-10	NV	6.80	0.0019	>=-2.5 & <=2.5	Pass
			0	NV	8.80	0.0024	>=-2.5 & <=2.5	Pass
			10	NV	-1.30	-0.0004	>=-2.5 & <=2.5	Pass
			20	NV	14.00	0.0039	>=-2.5 & <=2.5	Pass
			30	NV	5.20	0.0014	>=-2.5 & <=2.5	Pass
			40	NV	-11.10	-0.0031	>=-2.5 & <=2.5	Pass
CP-OFDM 256 QAM	3624.99	Outer_Full	20	LV	17.80	0.0049	>=-2.5 & <=2.5	Pass
				HV	1.10	0.0003	>=-2.5 & <=2.5	Pass
			-30	NV	6.40	0.0018	>=-2.5 & <=2.5	Pass
			-20	NV	2.40	0.0007	>=-2.5 & <=2.5	Pass
			-10	NV	6.80	0.0019	>=-2.5 & <=2.5	Pass
			0	NV	8.80	0.0024	>=-2.5 & <=2.5	Pass
			10	NV	-1.30	-0.0004	>=-2.5 & <=2.5	Pass
			20	NV	14.00	0.0039	>=-2.5 & <=2.5	Pass
			30	NV	5.20	0.0014	>=-2.5 & <=2.5	Pass
			40	NV	-11.10	-0.0031	>=-2.5 & <=2.5	Pass



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4. 99% & 26dB Bandwidth

4.1 30k_MIMO_10MHz_NTNV

4.1.1 Test Result

5G NR n78d SCS=30kHz MIMO 10MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
CP-OFDM QPSK	3555	Outer Full	8.72	10.25	/	Pass
	3624.99	Outer Full	8.68	9.90	/	Pass
	3694.98	Outer Full	8.71	9.72	/	Pass
CP-OFDM 16 QAM	3555	Outer Full	8.71	10.43	/	Pass
	3624.99	Outer Full	8.71	10.09	/	Pass
	3694.98	Outer Full	8.72	10.28	/	Pass
CP-OFDM 64 QAM	3555	Outer Full	8.72	10.30	/	Pass
	3624.99	Outer Full	8.75	10.17	/	Pass
	3694.98	Outer Full	8.71	9.89	/	Pass
CP-OFDM 256 QAM	3555	Outer Full	8.72	10.20	/	Pass
	3624.99	Outer Full	8.67	9.96	/	Pass
	3694.98	Outer Full	8.71	9.94	/	Pass



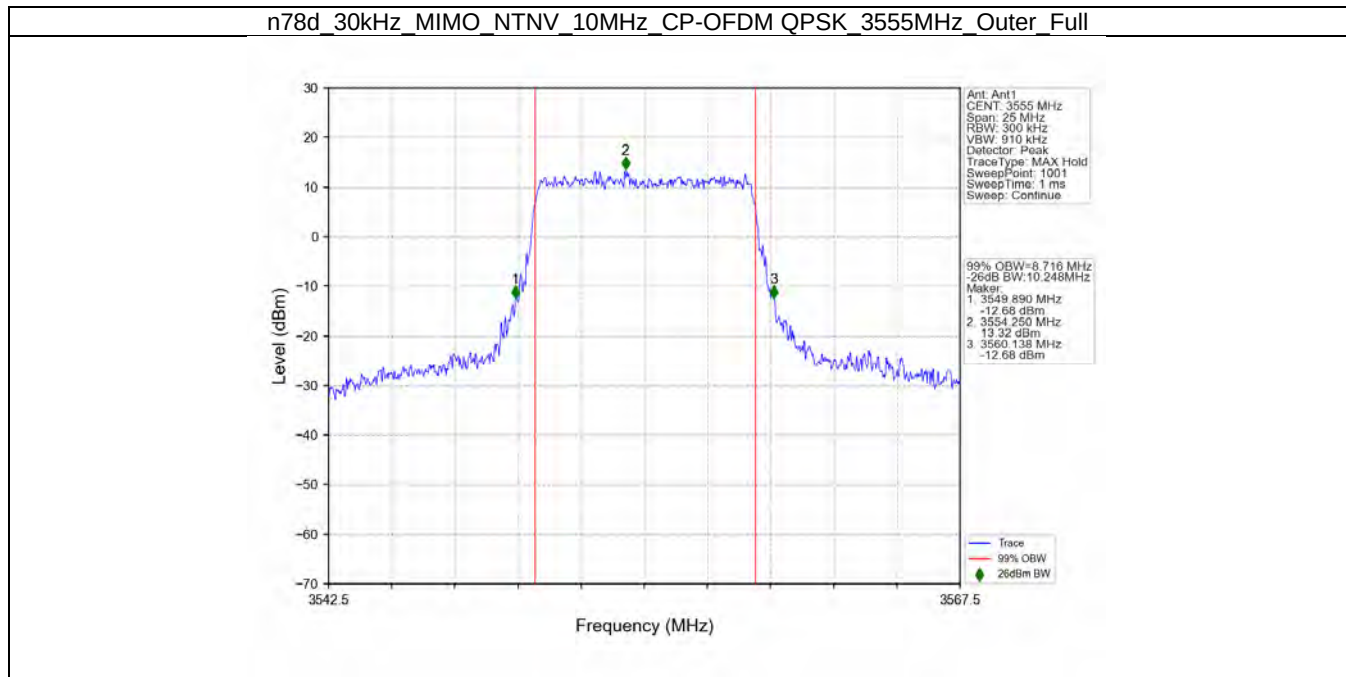
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4.1.2 Test Graph



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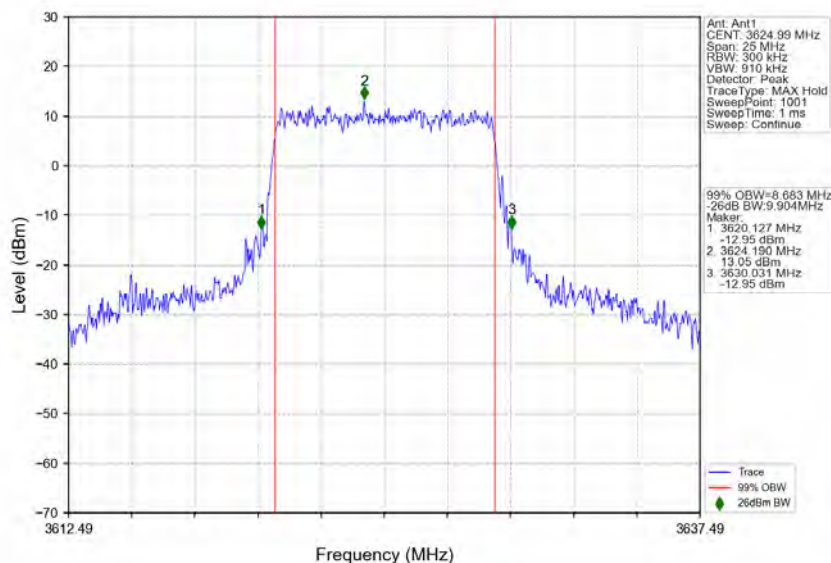
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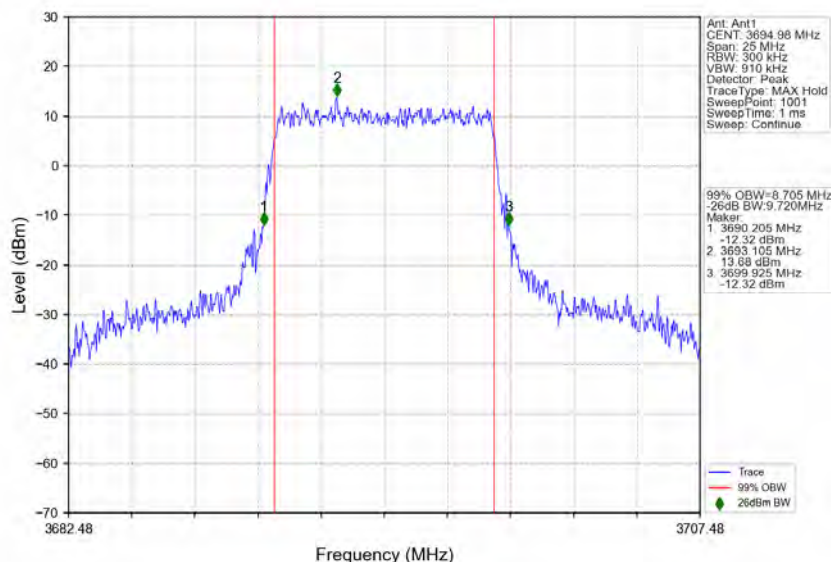
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n78d_30kHz_MIMO_NTNV_10MHz_CP-OFDM_QPSK_3624.99MHz_Outer_Full



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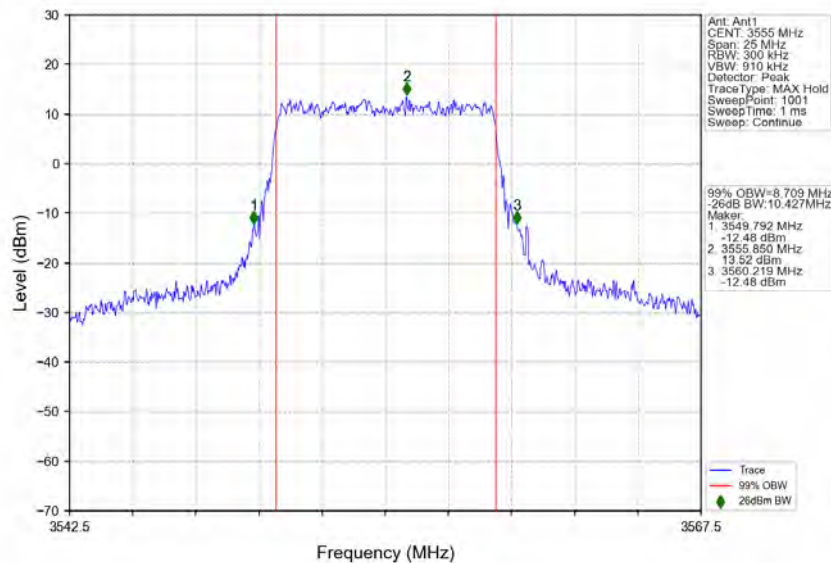
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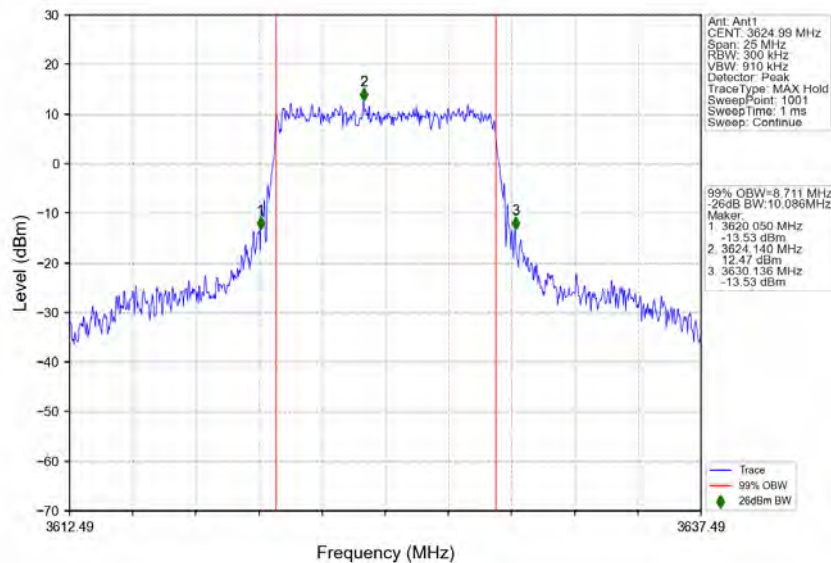
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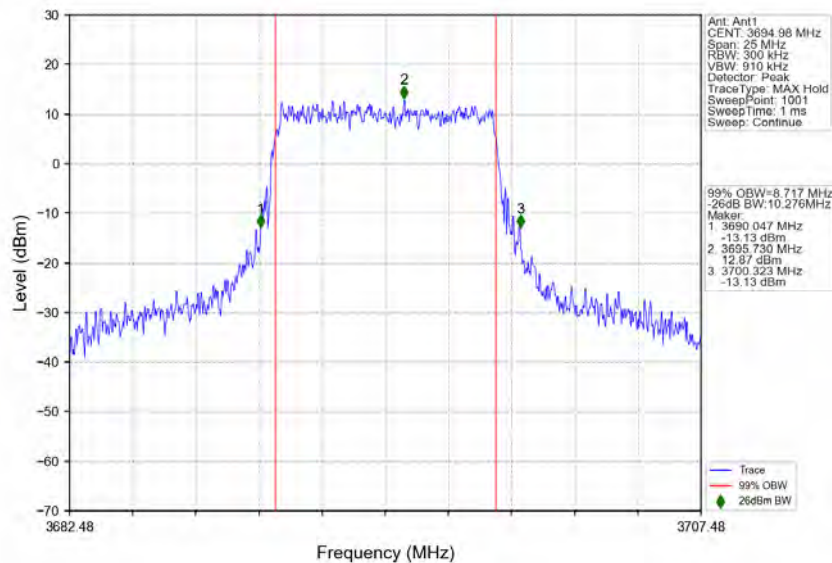
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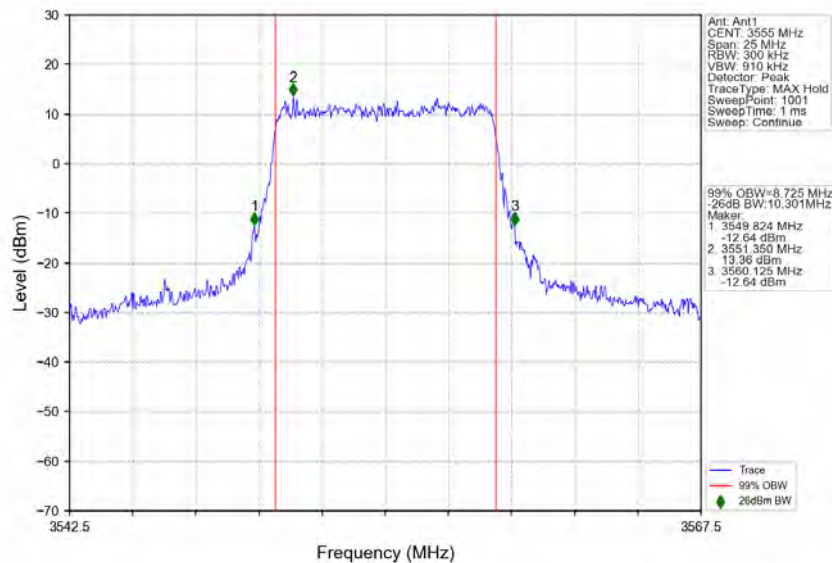
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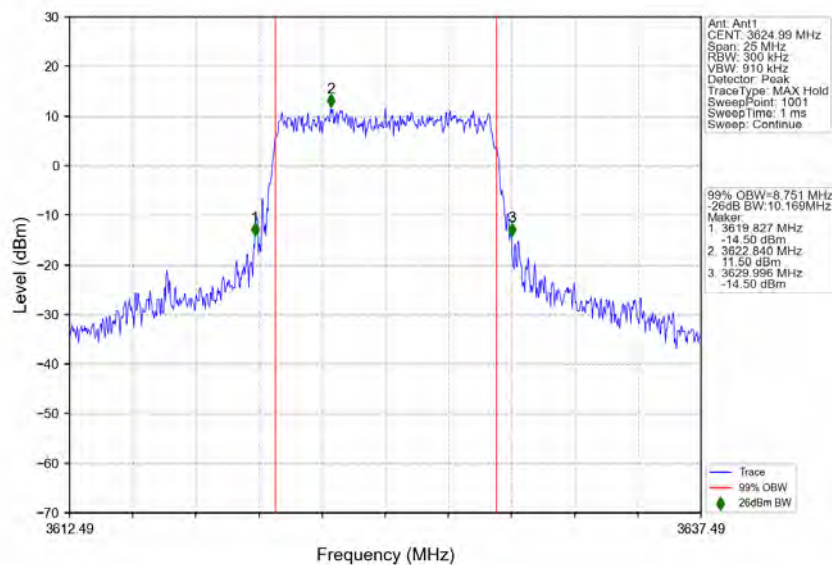
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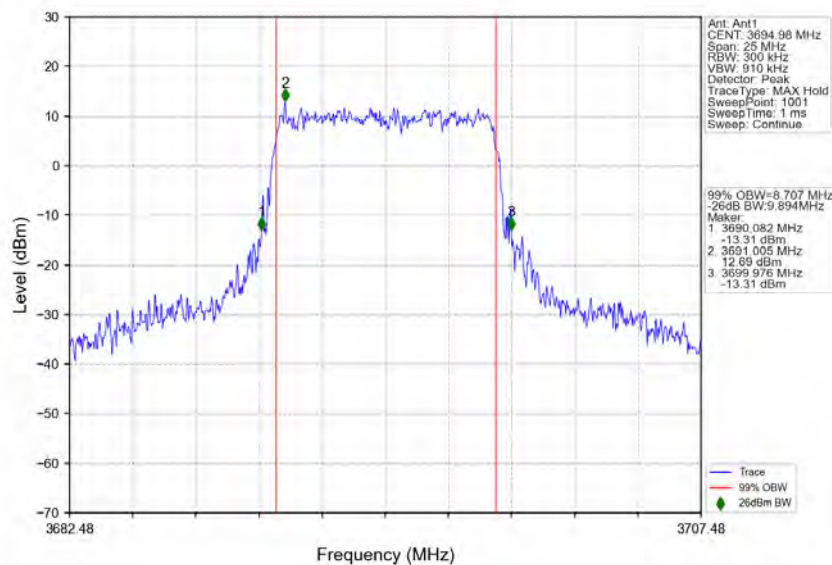
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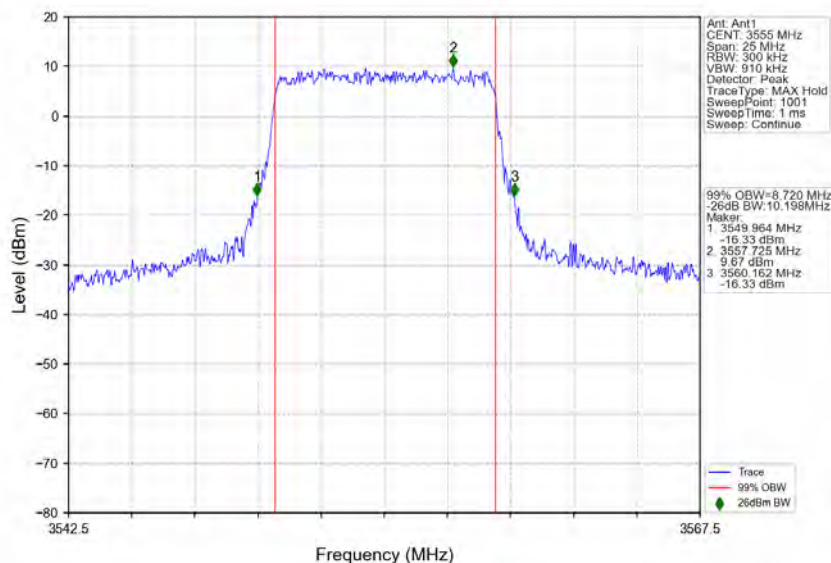
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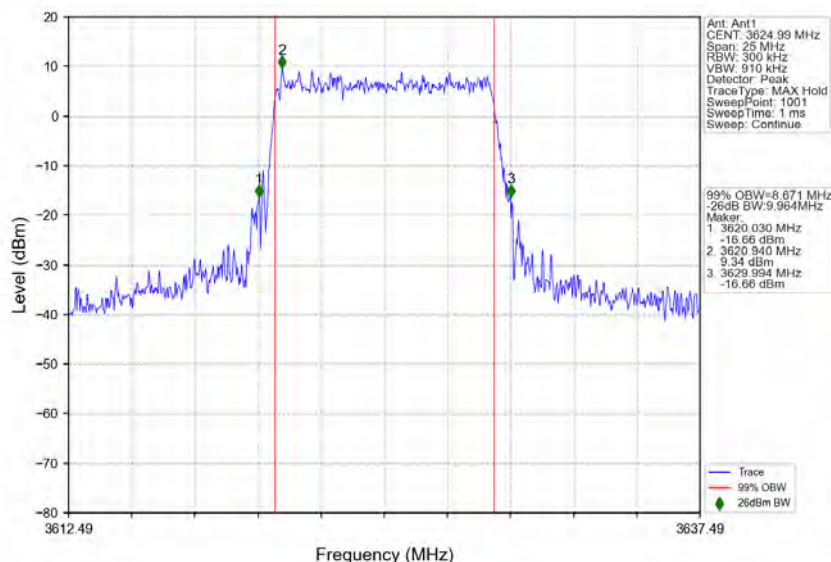
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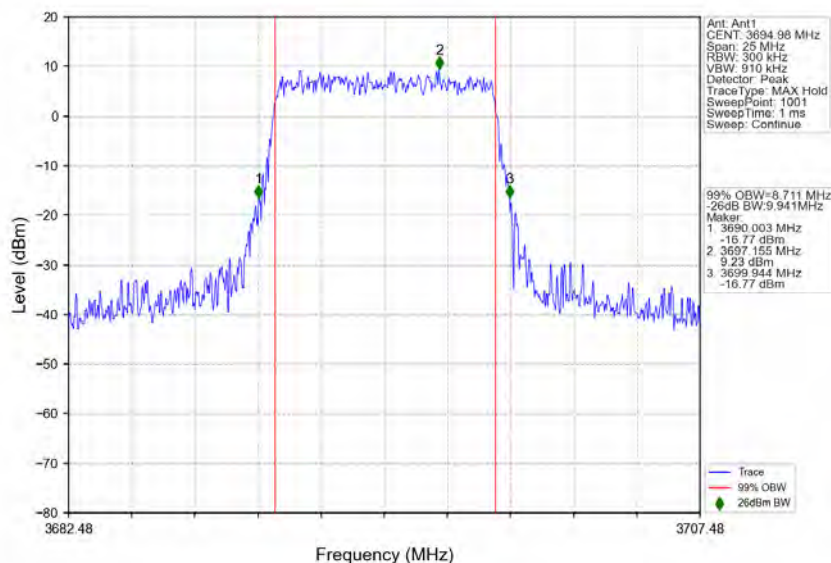
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4.2 30k_MIMO_15MHz_NTNV

4.2.1 Test Result

5G NR n78d SCS=30kHz MIMO 15MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
CP-OFDM QPSK	3557.52	Outer_Full	13.79	15.69	/	Pass
	3624.99	Outer_Full	13.76	15.29	/	Pass
	3692.49	Outer_Full	13.75	15.24	/	Pass
CP-OFDM 16 QAM	3557.52	Outer_Full	13.81	16.15	/	Pass
	3624.99	Outer_Full	13.79	15.67	/	Pass
	3692.49	Outer_Full	13.76	15.38	/	Pass
CP-OFDM 64 QAM	3557.52	Outer_Full	13.80	15.59	/	Pass
	3624.99	Outer_Full	13.79	15.24	/	Pass
	3692.49	Outer_Full	13.72	15.30	/	Pass
CP-OFDM 256 QAM	3557.52	Outer_Full	13.76	15.59	/	Pass
	3624.99	Outer_Full	13.73	15.24	/	Pass
	3692.49	Outer_Full	13.71	15.34	/	Pass



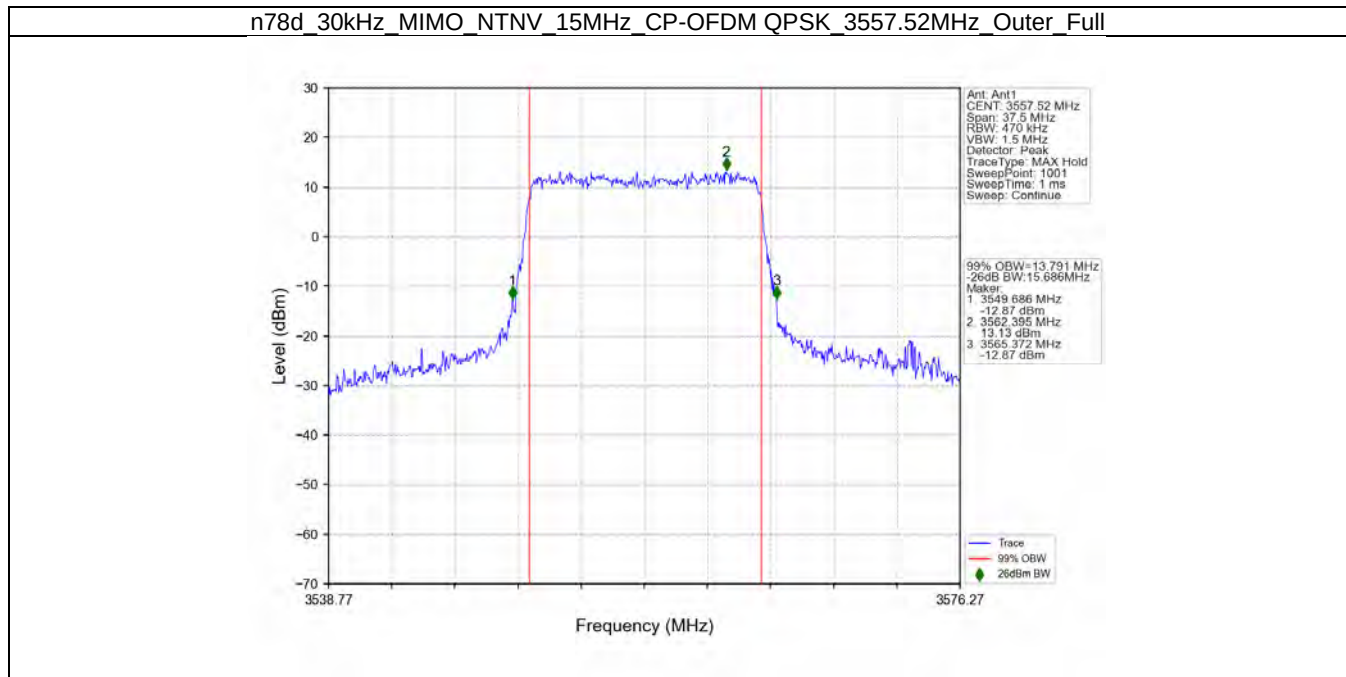
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4.2.2 Test Graph



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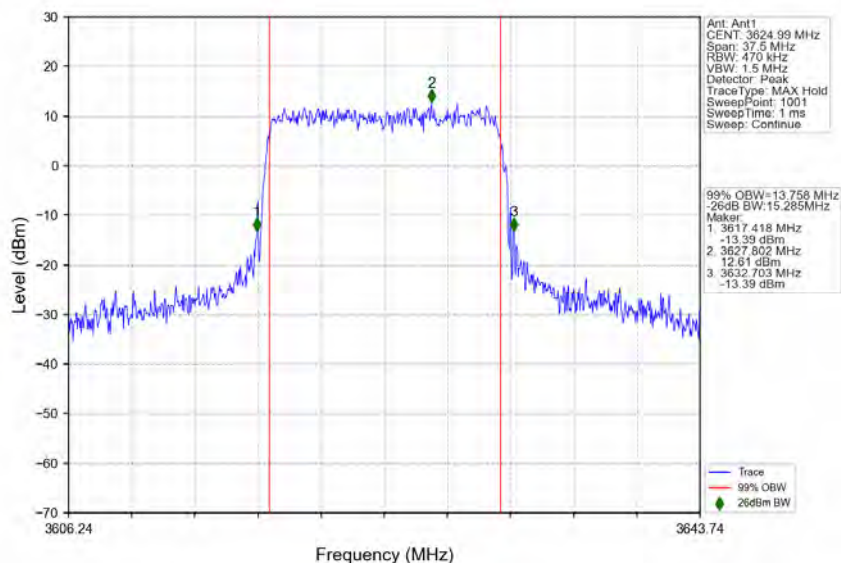
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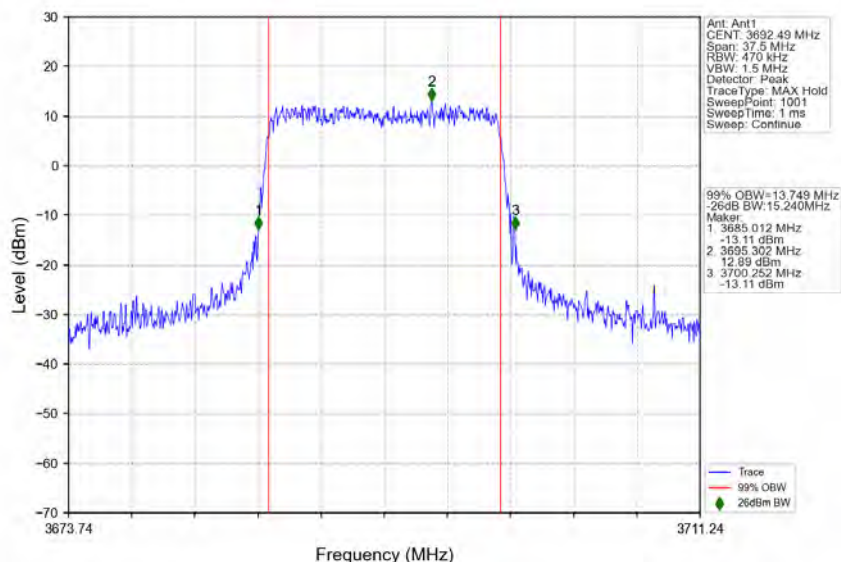
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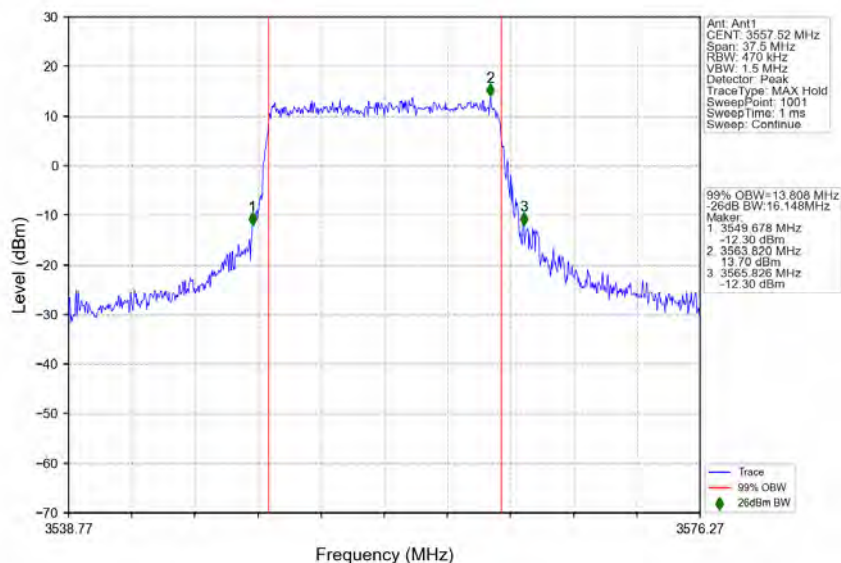
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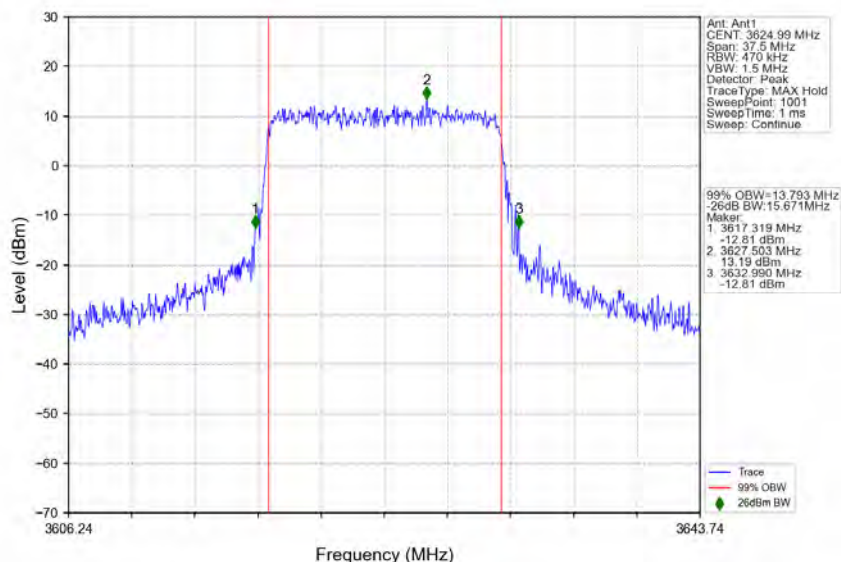
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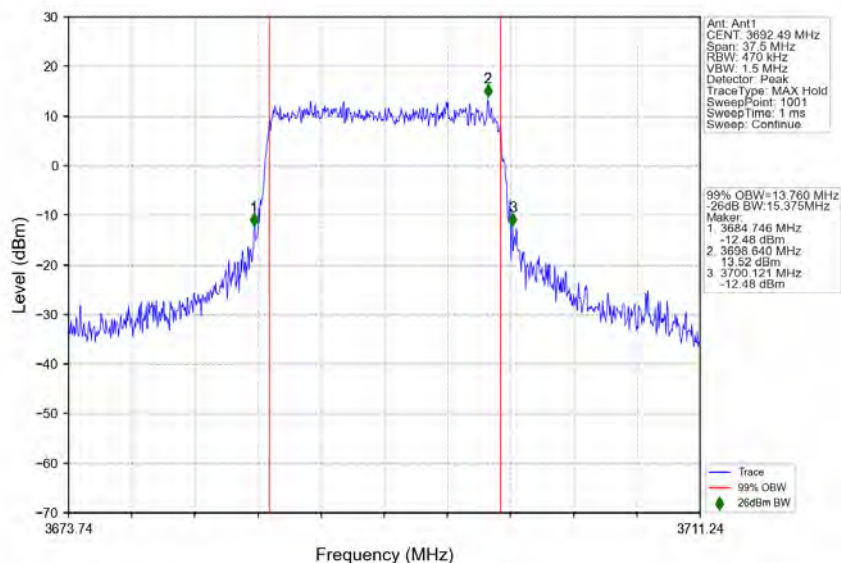
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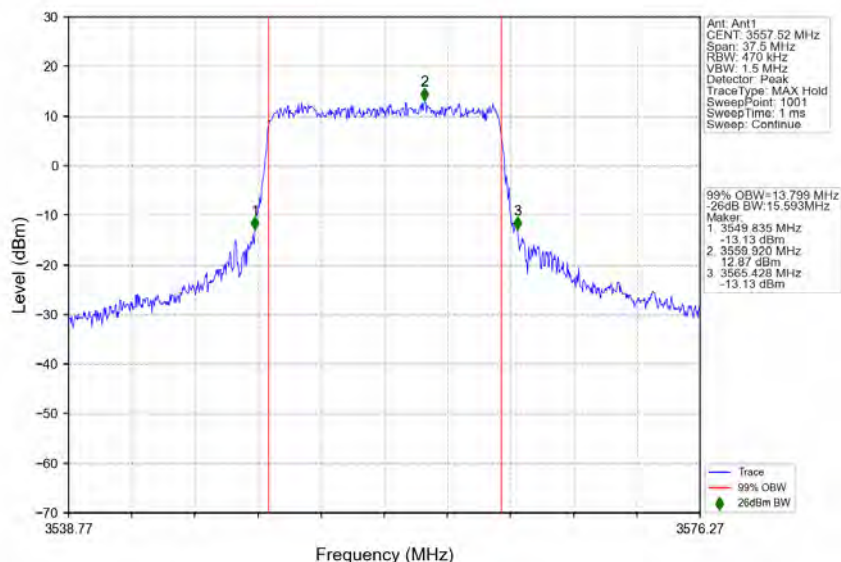
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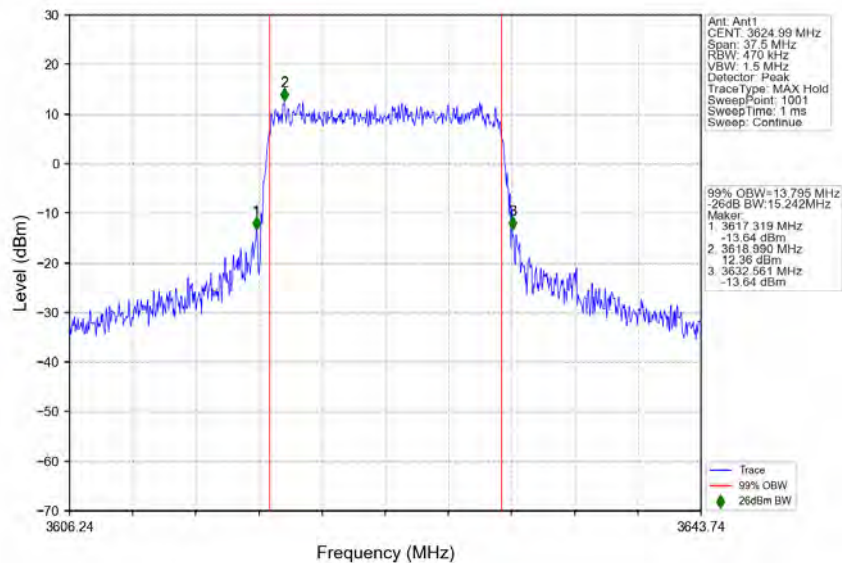
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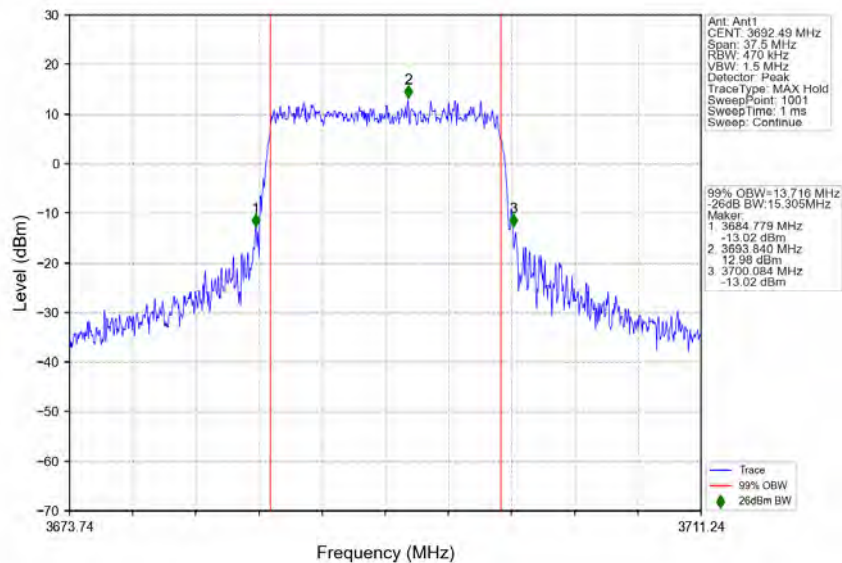
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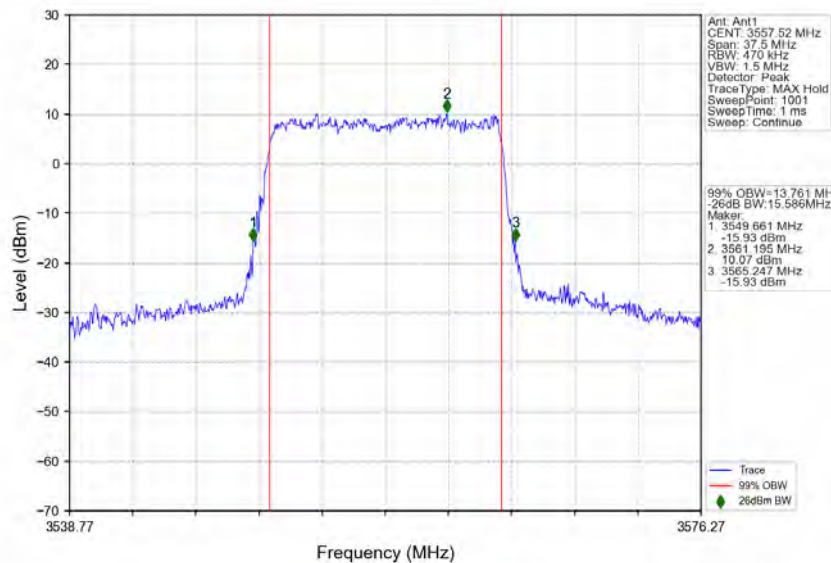
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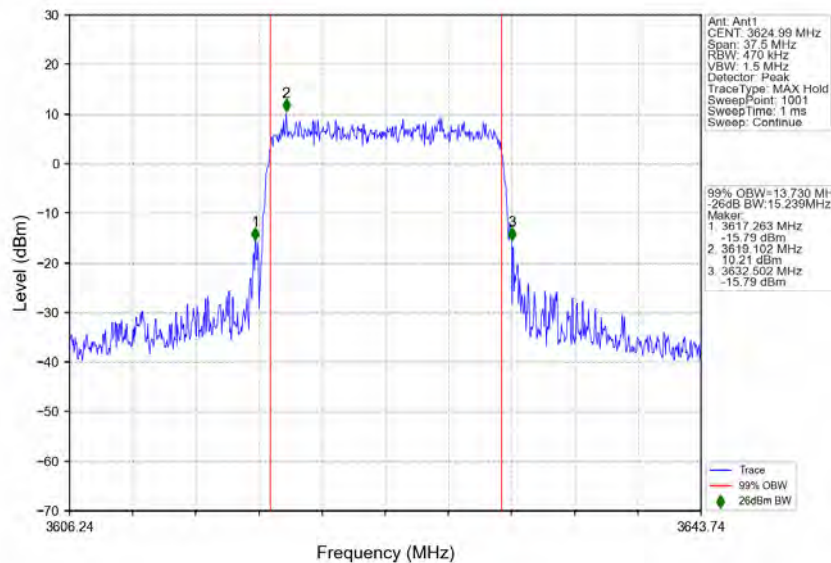
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n78d_30kHz_MIMO_NTNV_15MHz_CP-OFDM_256_QAM_3557.52MHz_Outer_Full



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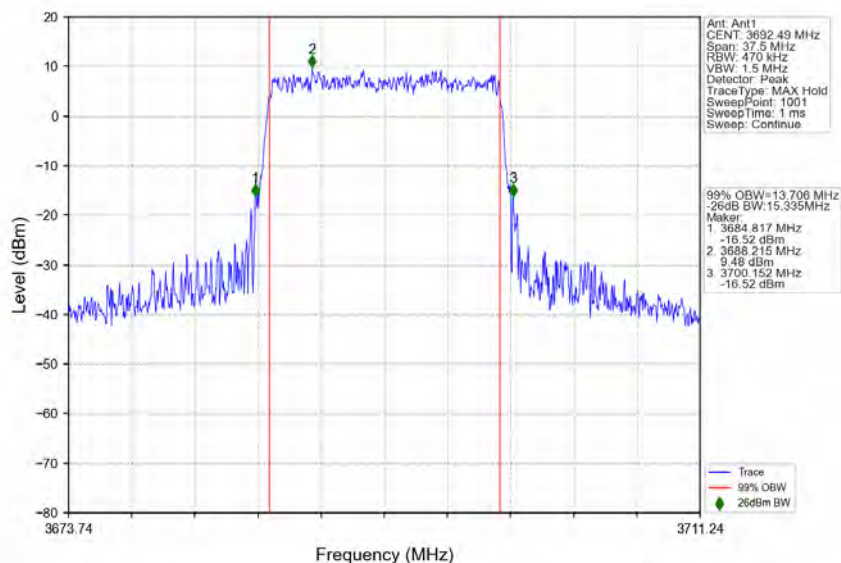
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n78d_30kHz_MIMO_NTNV_15MHz_CP-OFDM_256_QAM_3692.49MHz_Outer_Full



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4.3 30k_MIMO_20MHz_NTNV

4.3.1 Test Result

5G NR n78d SCS=30kHz MIMO 20MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
CP-OFDM QPSK	3560.01	Outer_Full	18.41	20.32	/	Pass
	3624.99	Outer_Full	18.35	20.15	/	Pass
	3690	Outer_Full	18.37	20.15	/	Pass
CP-OFDM 16 QAM	3560.01	Outer_Full	18.43	20.38	/	Pass
	3624.99	Outer_Full	18.48	20.12	/	Pass
	3690	Outer_Full	18.36	19.71	/	Pass
CP-OFDM 64 QAM	3560.01	Outer_Full	18.44	20.31	/	Pass
	3624.99	Outer_Full	18.43	20.00	/	Pass
	3690	Outer_Full	18.38	20.01	/	Pass
CP-OFDM 256 QAM	3560.01	Outer_Full	18.38	20.48	/	Pass
	3624.99	Outer_Full	18.38	20.09	/	Pass
	3690	Outer_Full	18.35	20.29	/	Pass



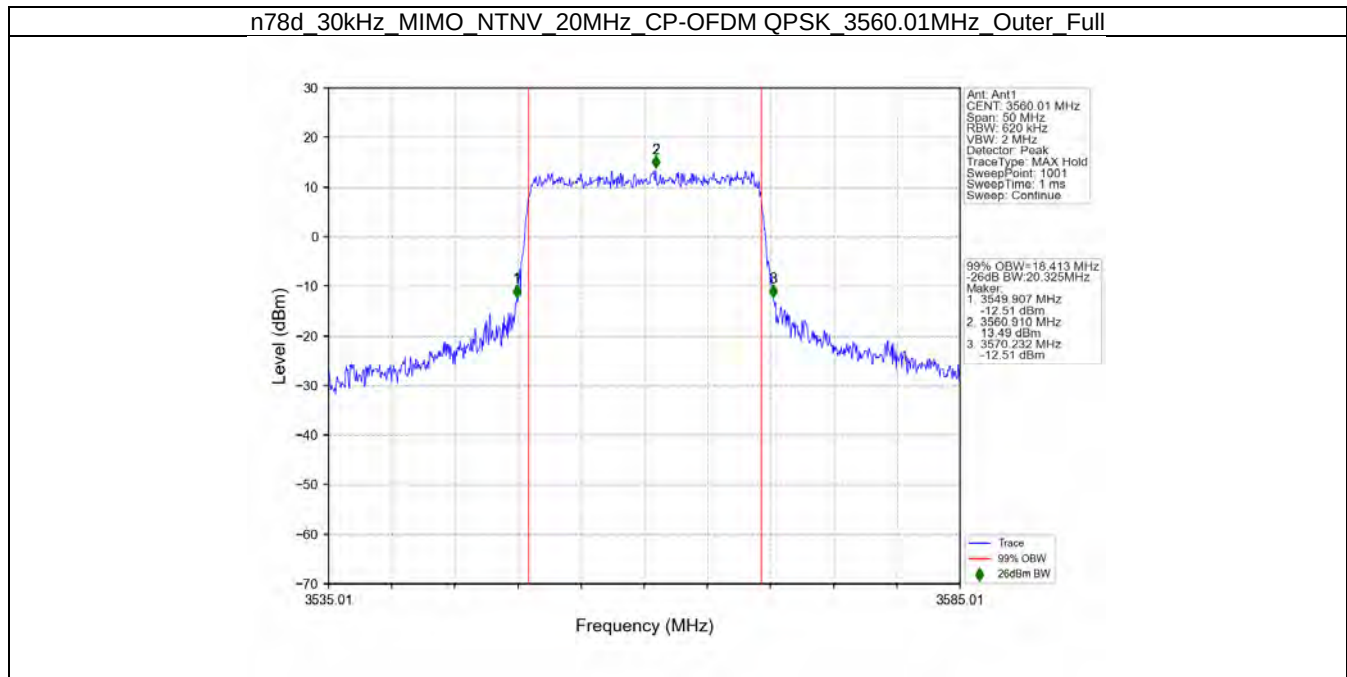
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4.3.2 Test Graph



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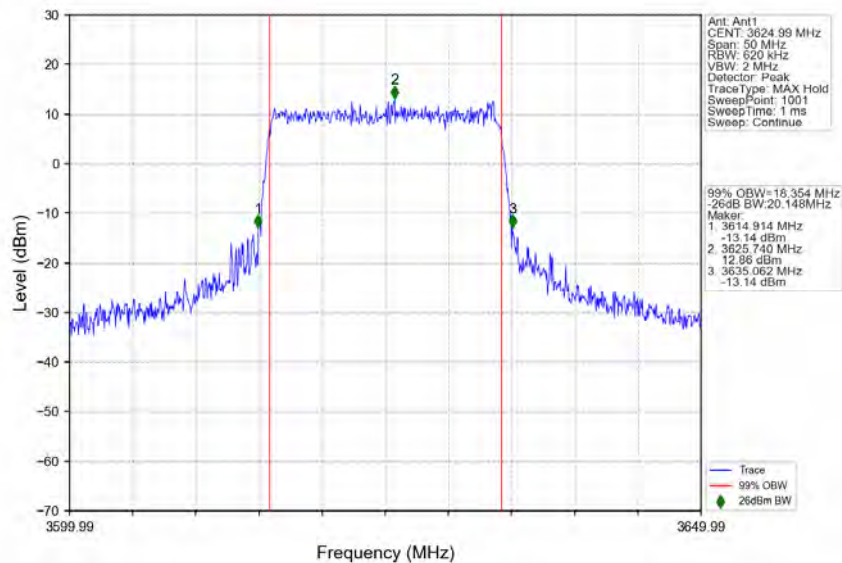
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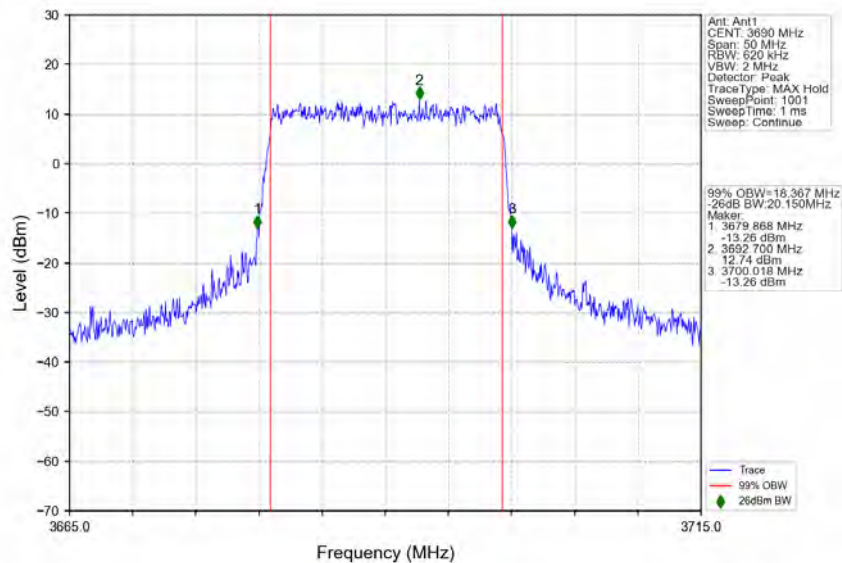
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n78d_30kHz_MIMO_NTNV_20MHz_CP-OFDM QPSK_3624.99MHz_Outer_Full



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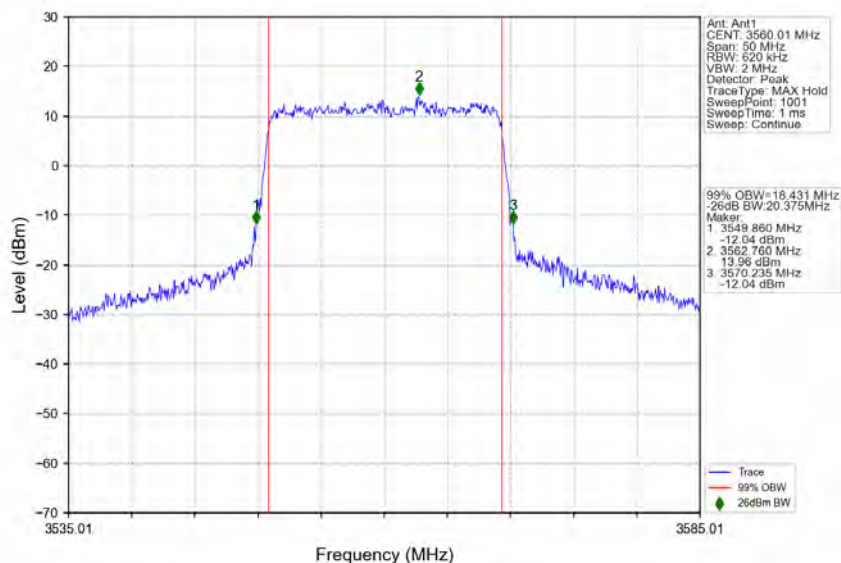
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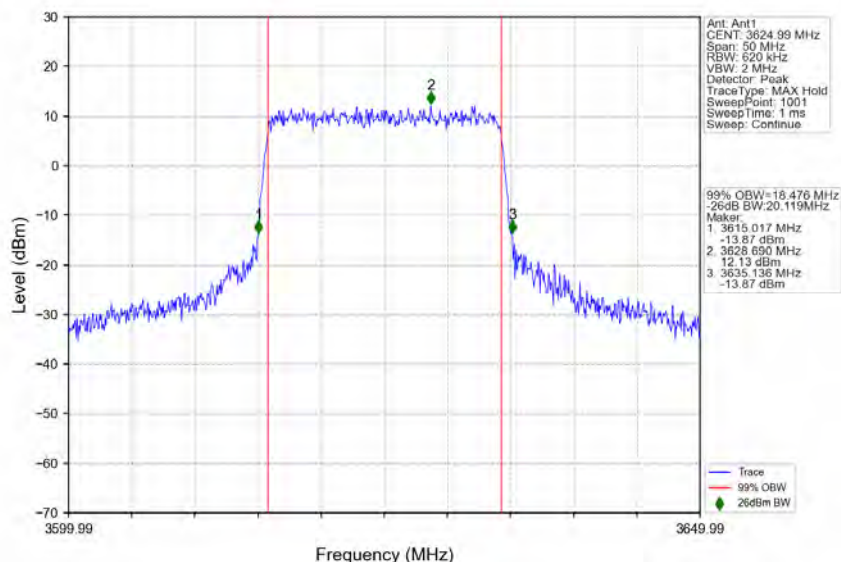
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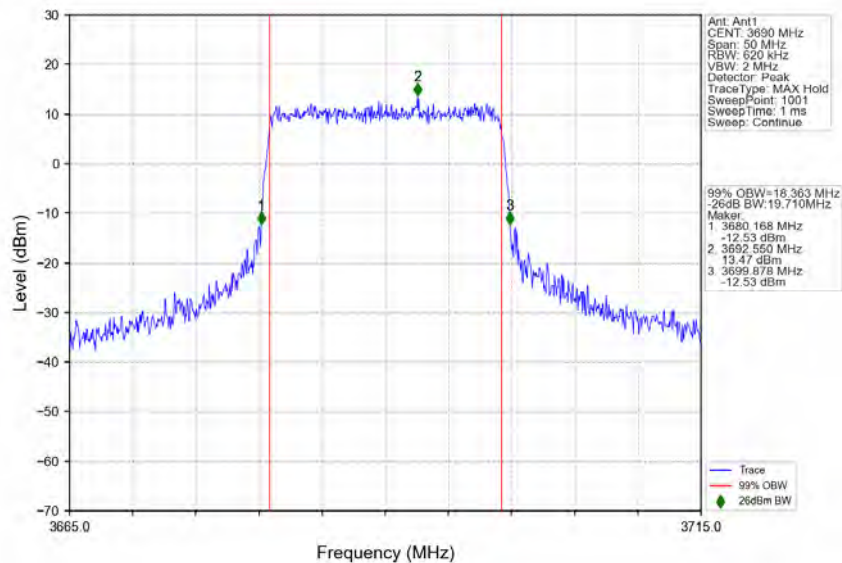
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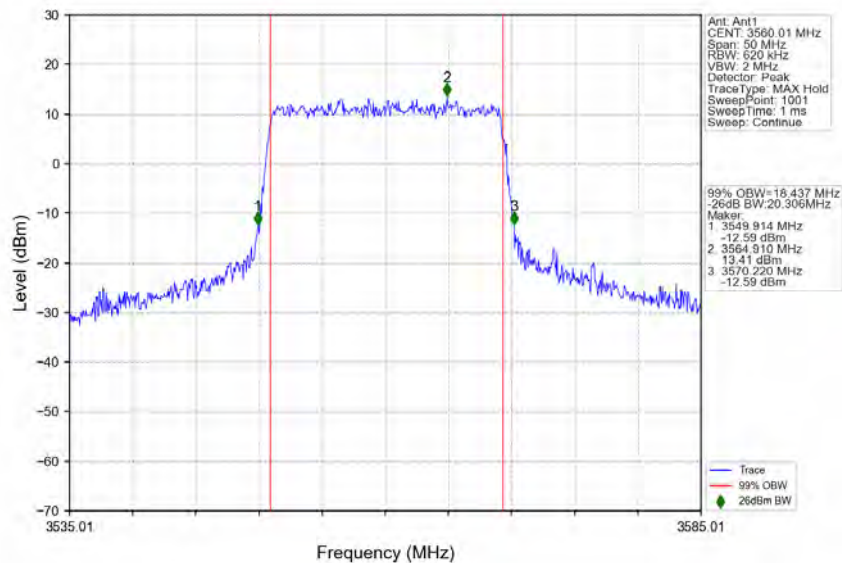
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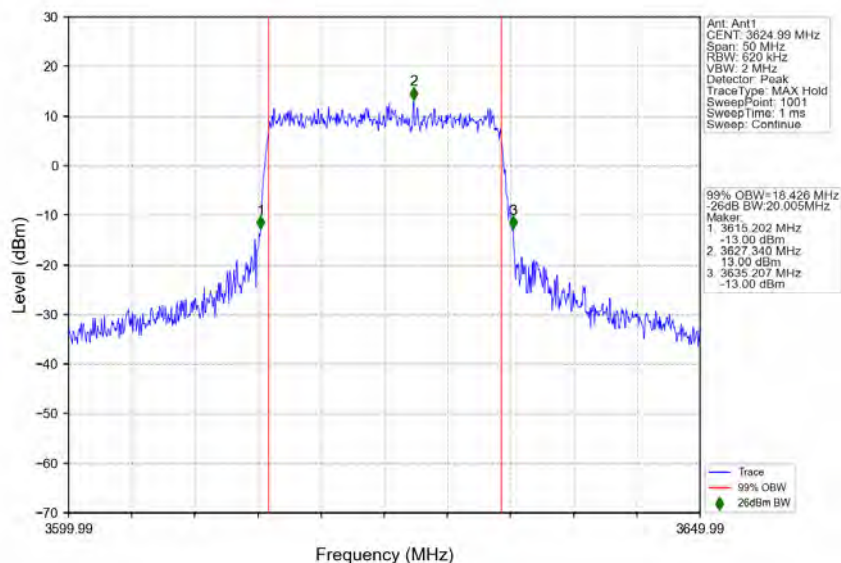
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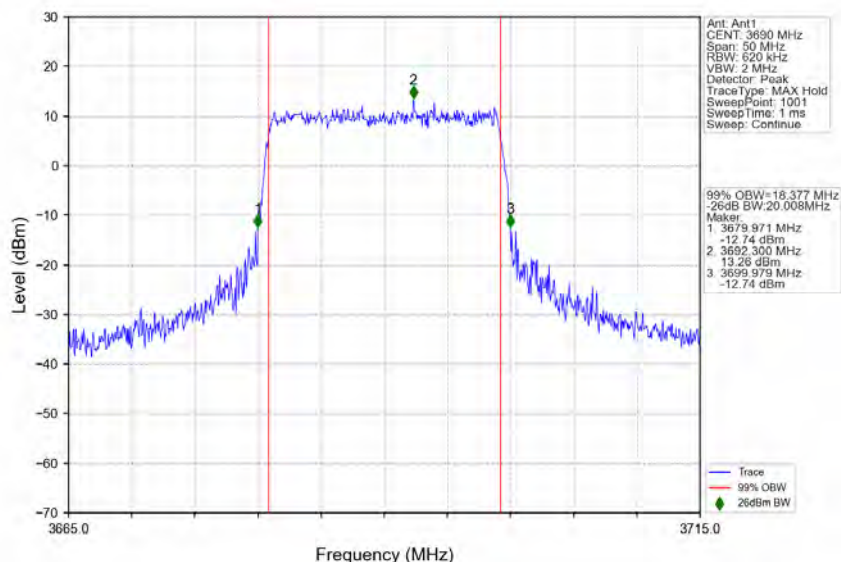
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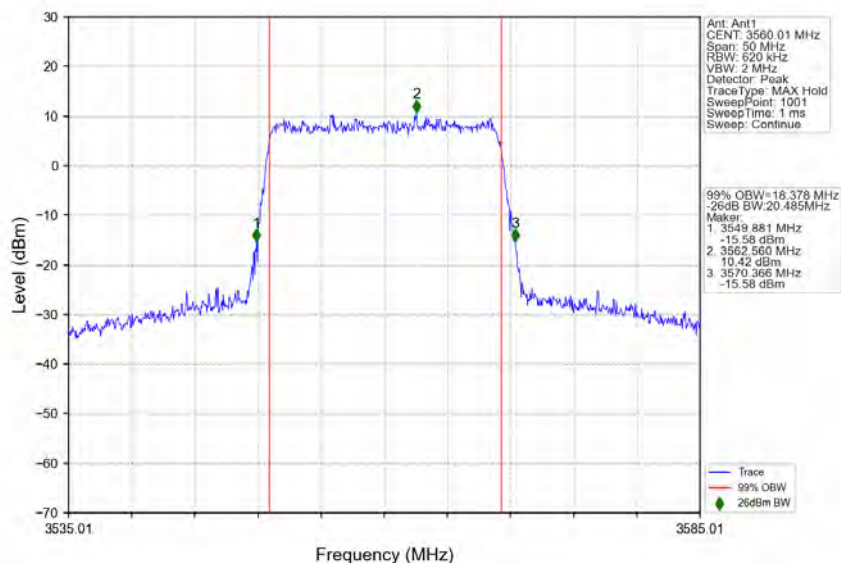
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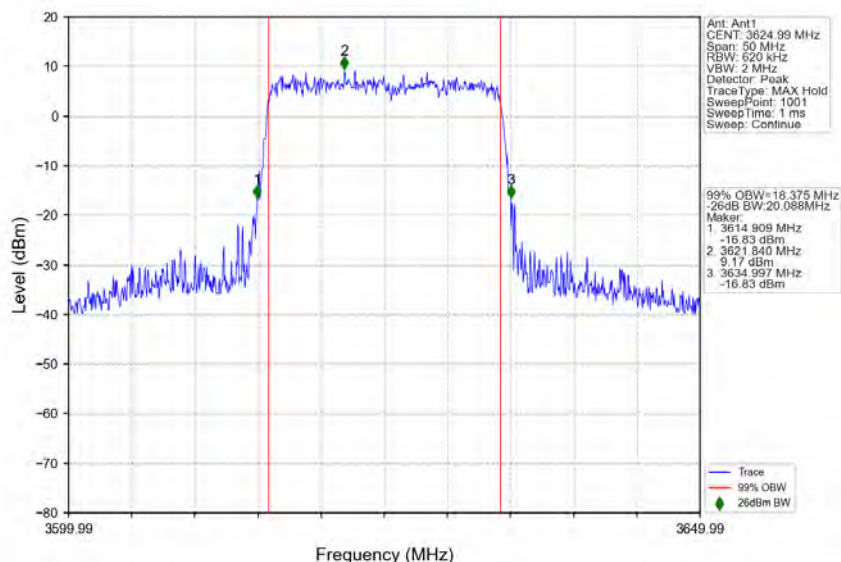
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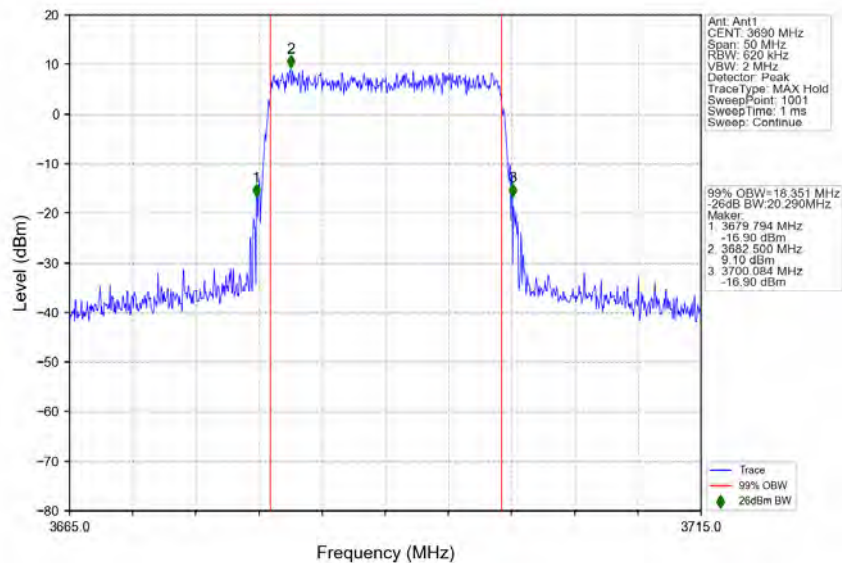
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4.4 30k_MIMO_30MHz_NTNV

4.4.1 Test Result

5G NR n78d SCS=30kHz MIMO 30MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
CP-OFDM QPSK	3565.02	Outer_Full	28.16	30.36	/	Pass
	3624.99	Outer_Full	28.10	30.78	/	Pass
	3684.99	Outer_Full	28.13	30.06	/	Pass
CP-OFDM 16 QAM	3565.02	Outer_Full	28.13	30.34	/	Pass
	3624.99	Outer_Full	28.22	30.56	/	Pass
	3684.99	Outer_Full	28.07	30.48	/	Pass
CP-OFDM 64 QAM	3565.02	Outer_Full	28.16	30.61	/	Pass
	3624.99	Outer_Full	28.14	30.24	/	Pass
	3684.99	Outer_Full	28.14	30.37	/	Pass
CP-OFDM 256 QAM	3565.02	Outer_Full	28.16	30.27	/	Pass
	3624.99	Outer_Full	28.18	30.18	/	Pass
	3684.99	Outer_Full	28.14	30.30	/	Pass



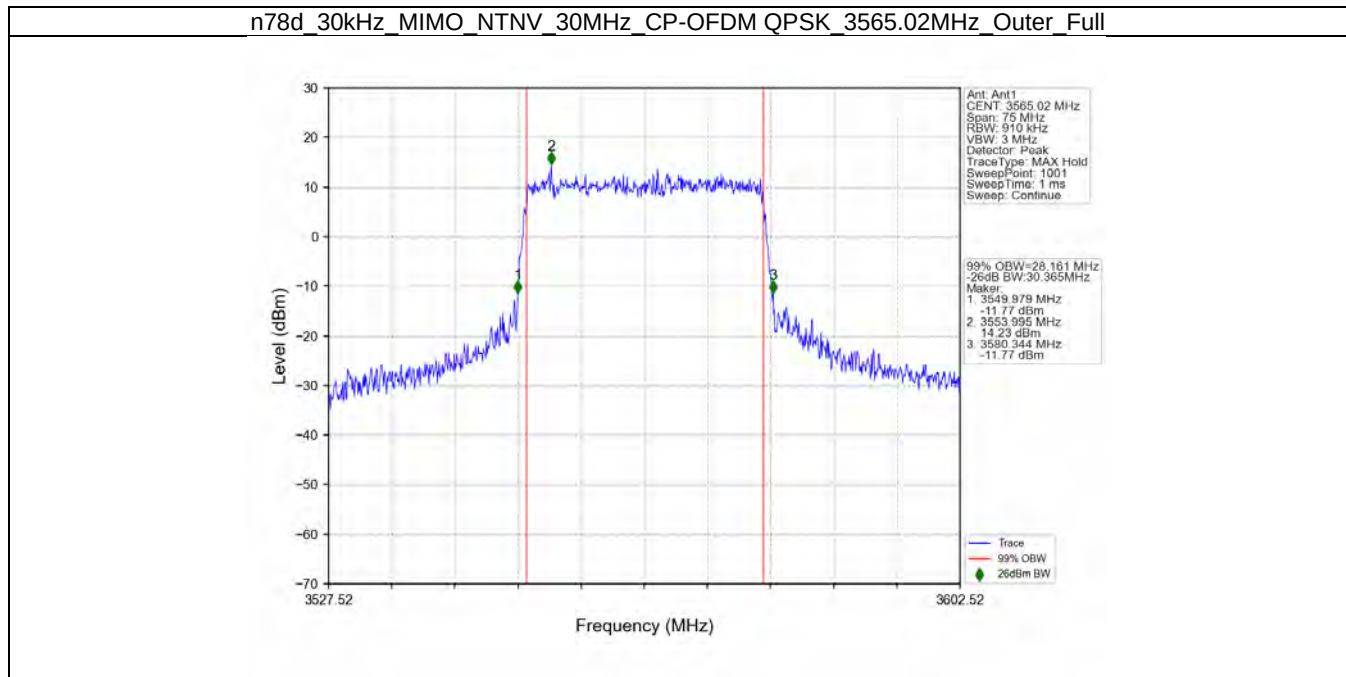
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4.4.2 Test Graph



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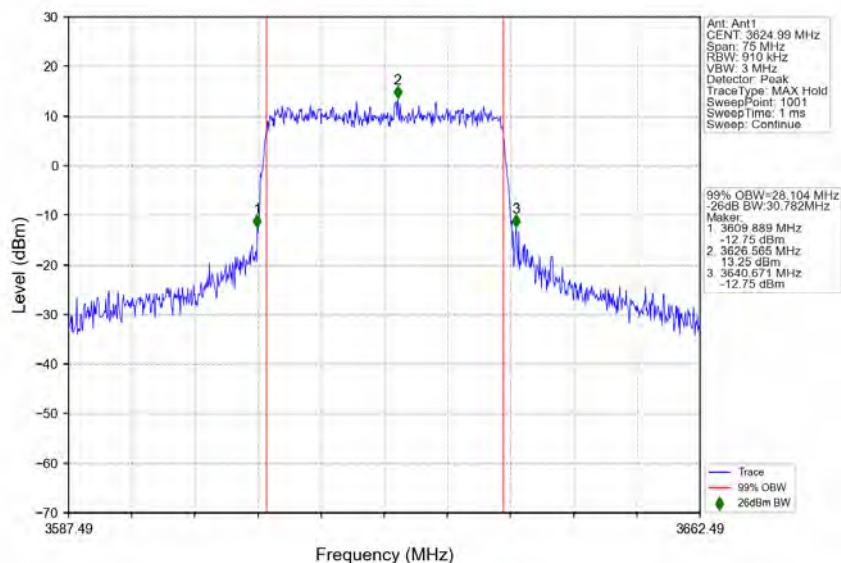
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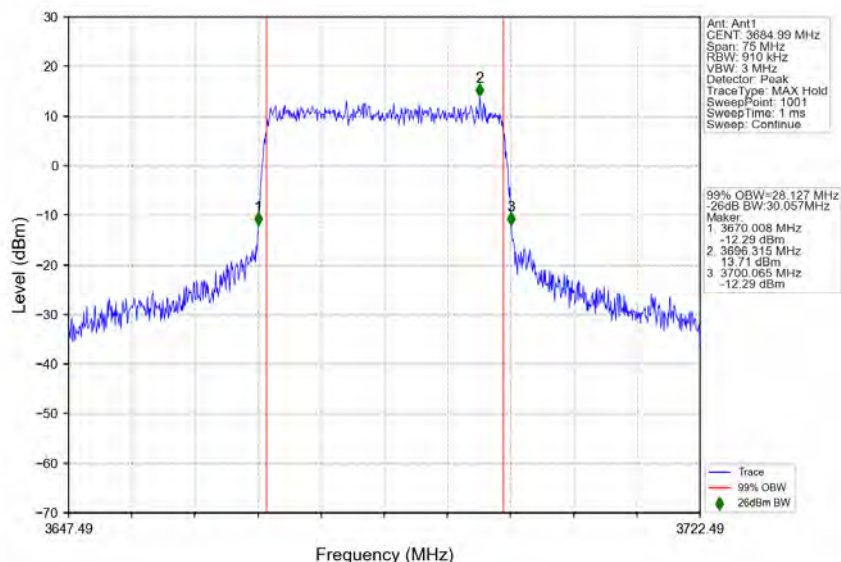
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n78d_30kHz_MIMO_NTNV_30MHz_CP-OFDM_QPSK_3624.99MHz_Outer_Full



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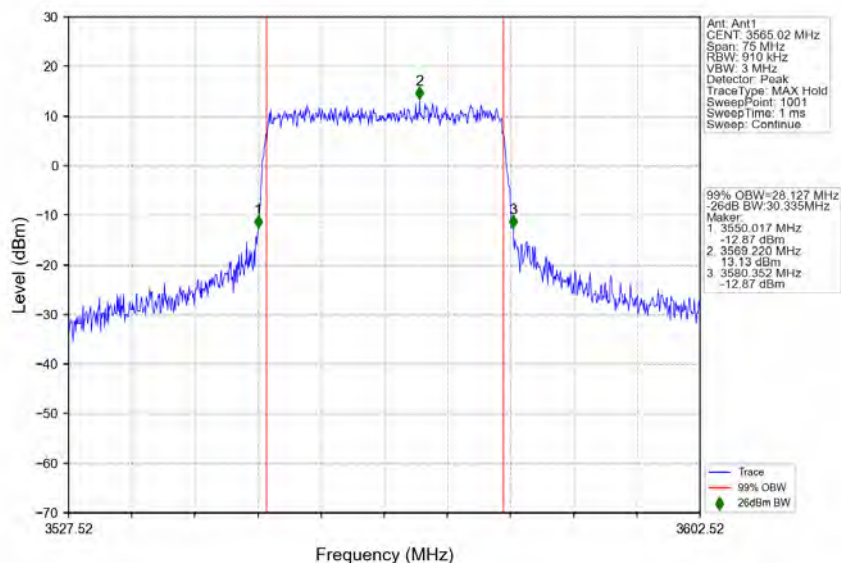
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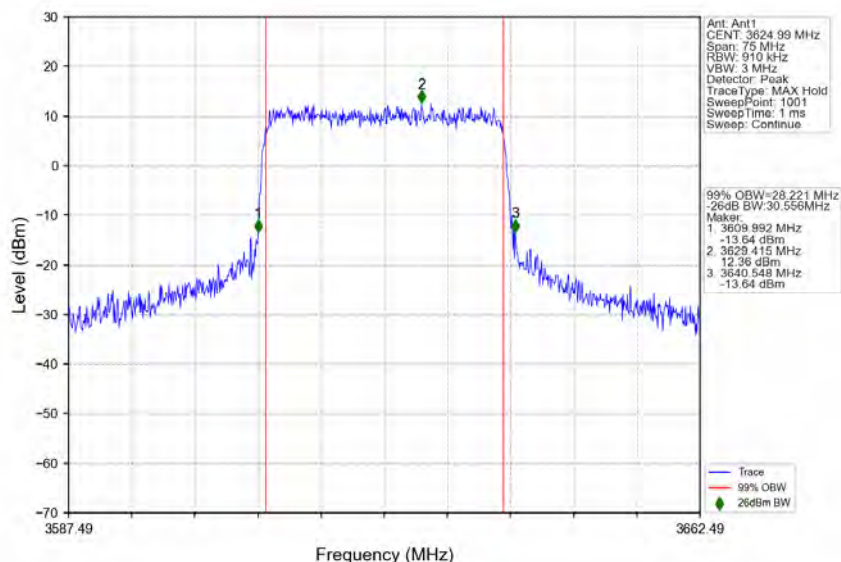
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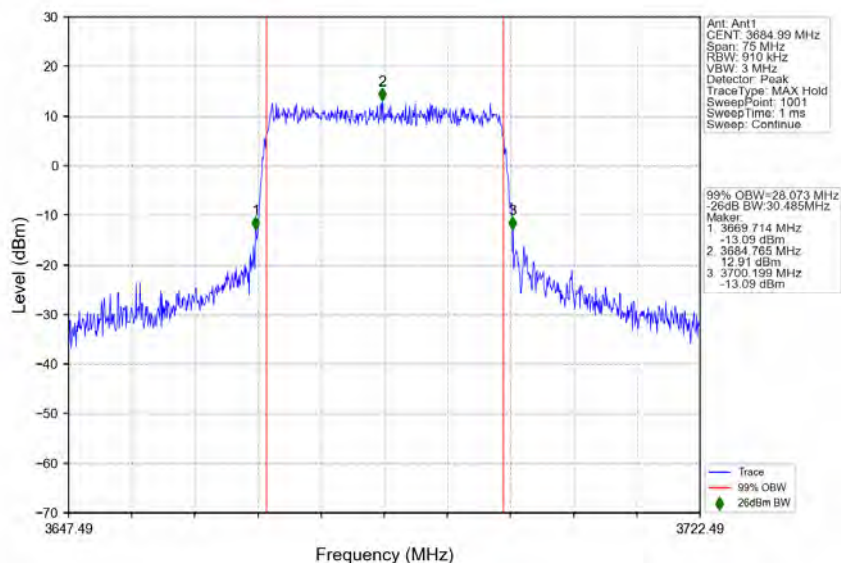
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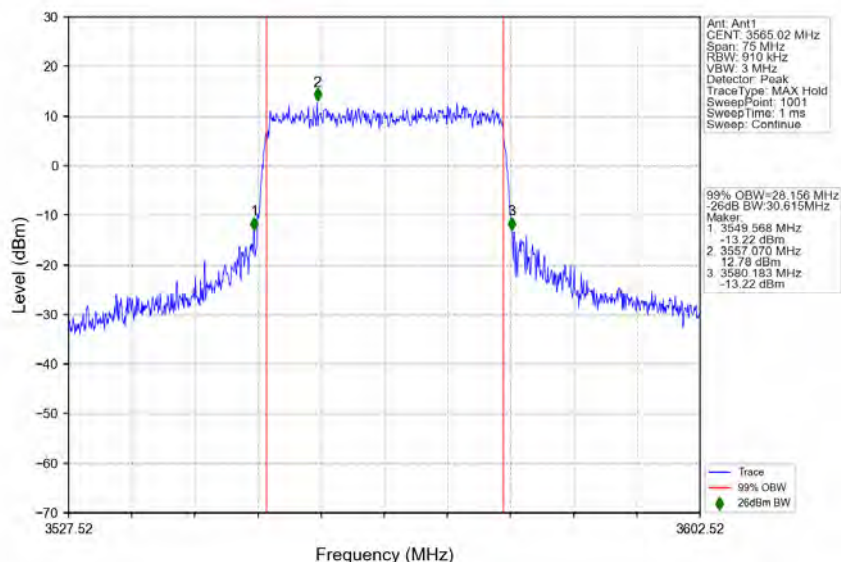
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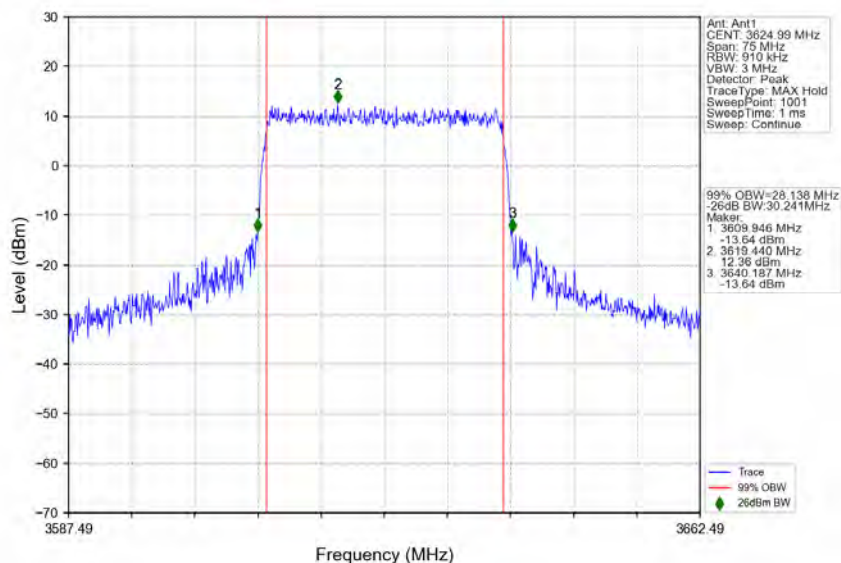
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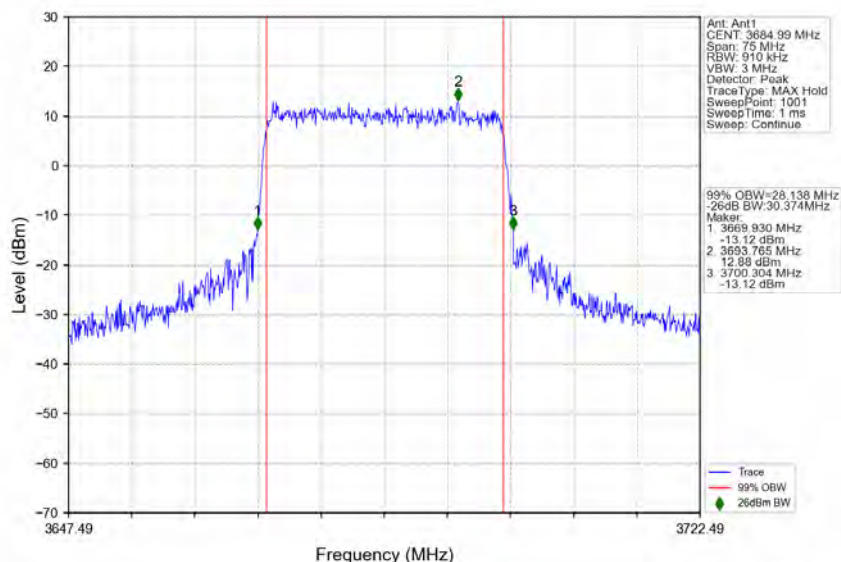
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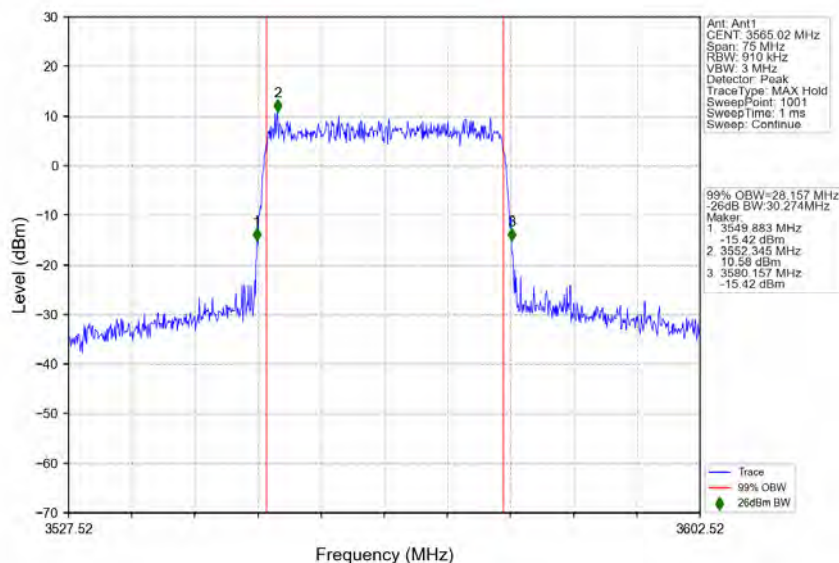
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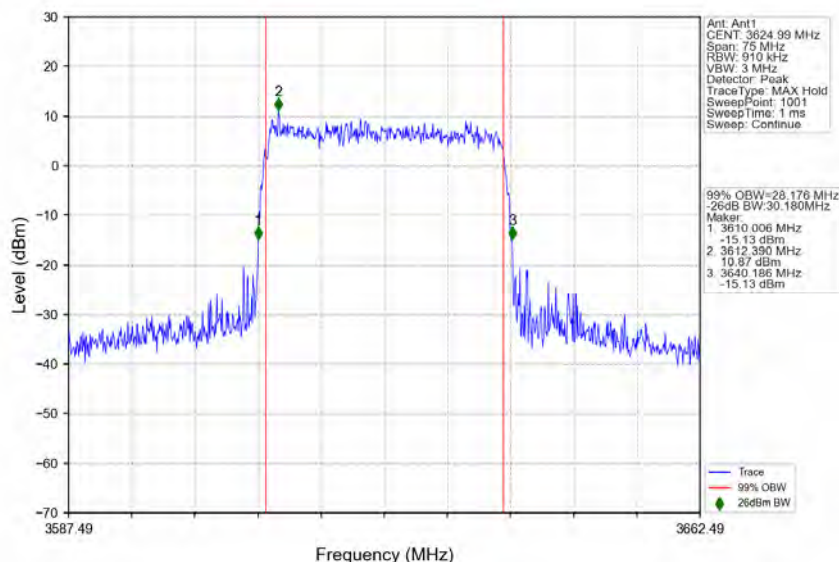
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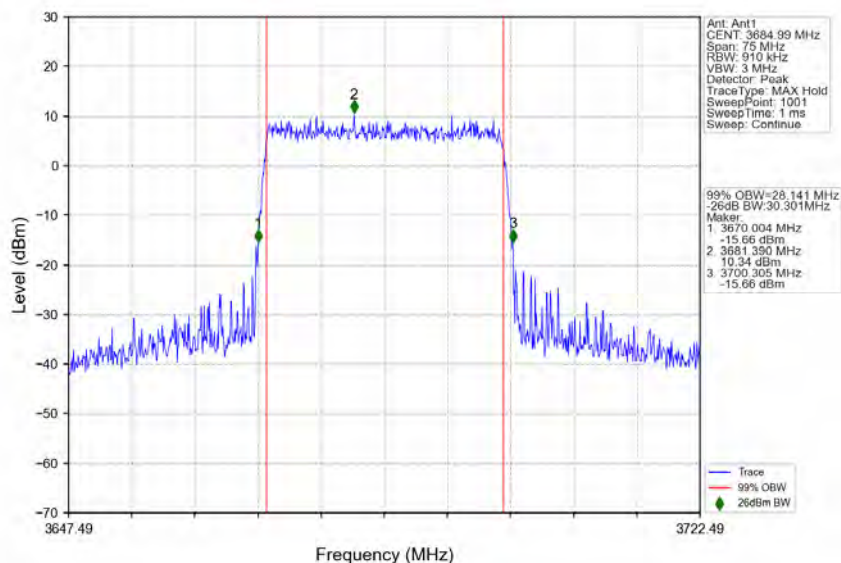
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4.5 30k_MIMO_40MHz_NTNV

4.5.1 Test Result

5G NR n78d SCS=30kHz MIMO 40MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
CP-OFDM QPSK	3570	Outer_Full	38.14	40.75	/	Pass
	3624.99	Outer_Full	38.20	40.66	/	Pass
	3679.98	Outer_Full	38.23	41.01	/	Pass
CP-OFDM 16 QAM	3570	Outer_Full	38.17	40.93	/	Pass
	3624.99	Outer_Full	38.21	41.06	/	Pass
	3679.98	Outer_Full	38.13	40.69	/	Pass
CP-OFDM 64 QAM	3570	Outer_Full	38.13	40.73	/	Pass
	3624.99	Outer_Full	38.22	41.03	/	Pass
	3679.98	Outer_Full	38.32	41.04	/	Pass
CP-OFDM 256 QAM	3570	Outer_Full	38.13	40.84	/	Pass
	3624.99	Outer_Full	38.15	40.92	/	Pass
	3679.98	Outer_Full	38.30	40.67	/	Pass



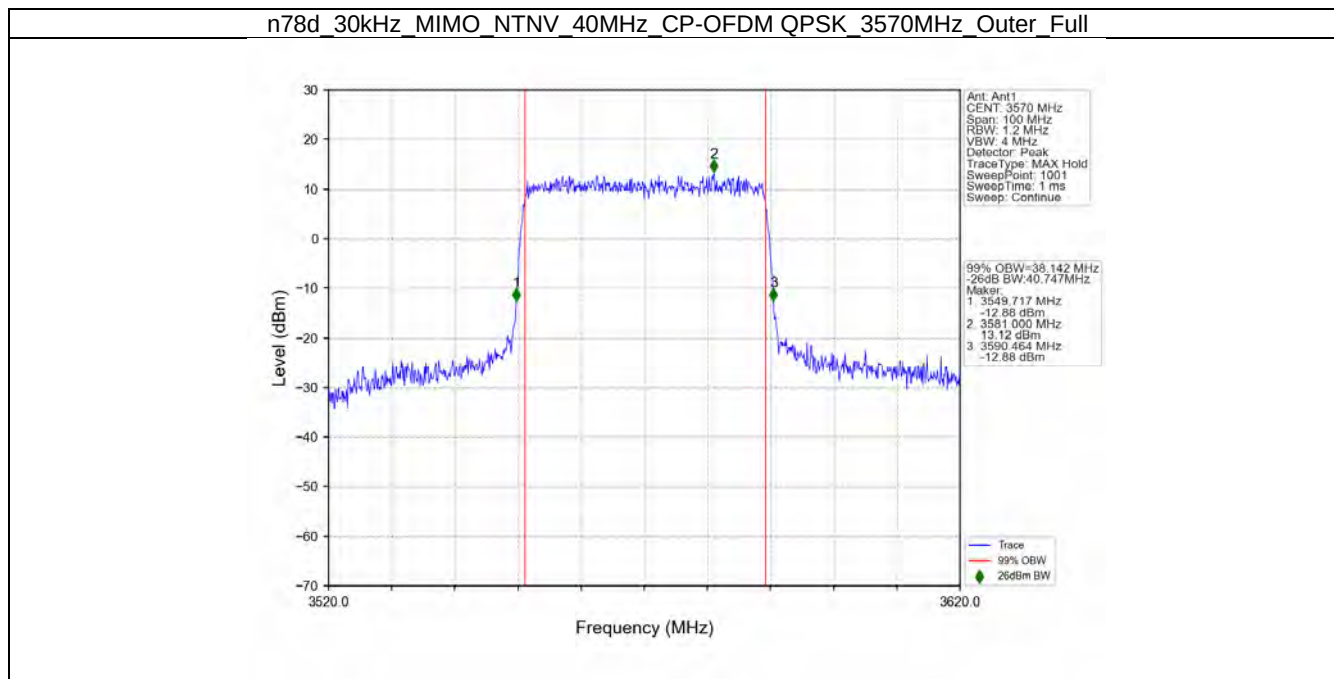
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4.5.2 Test Graph



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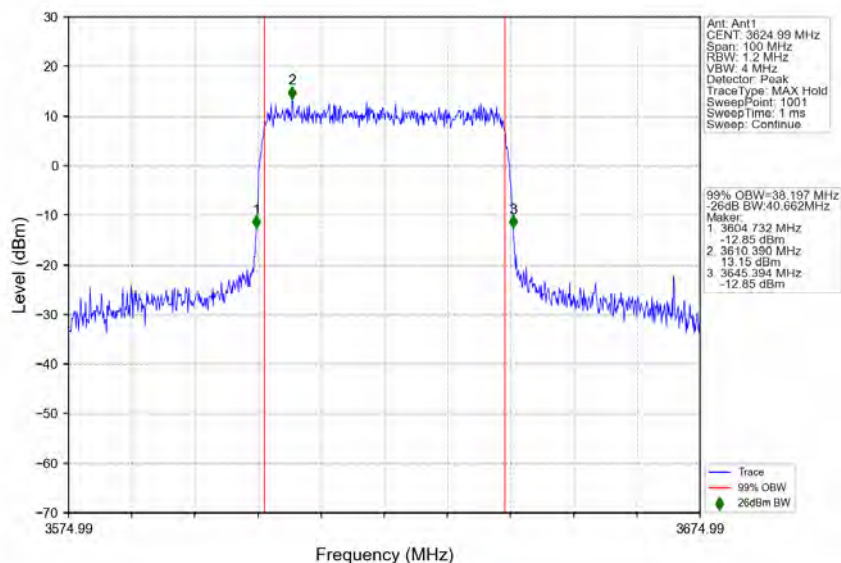
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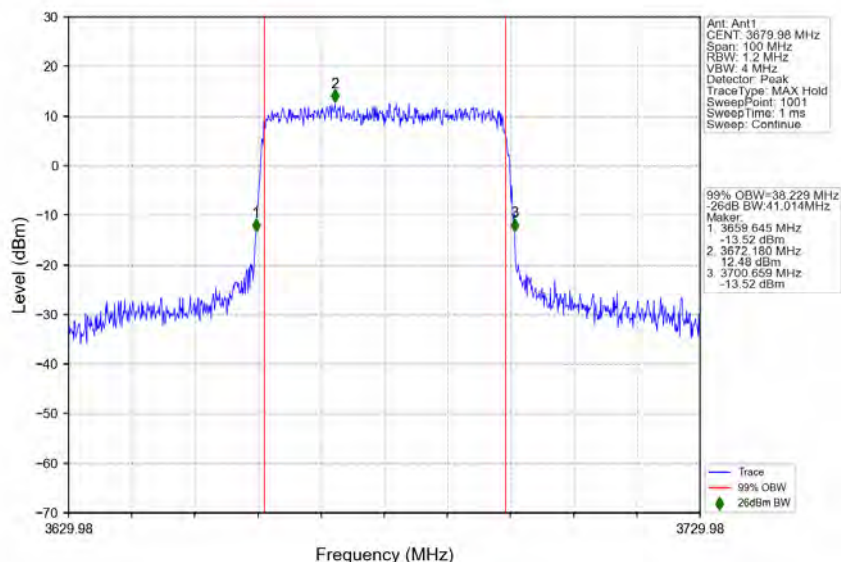
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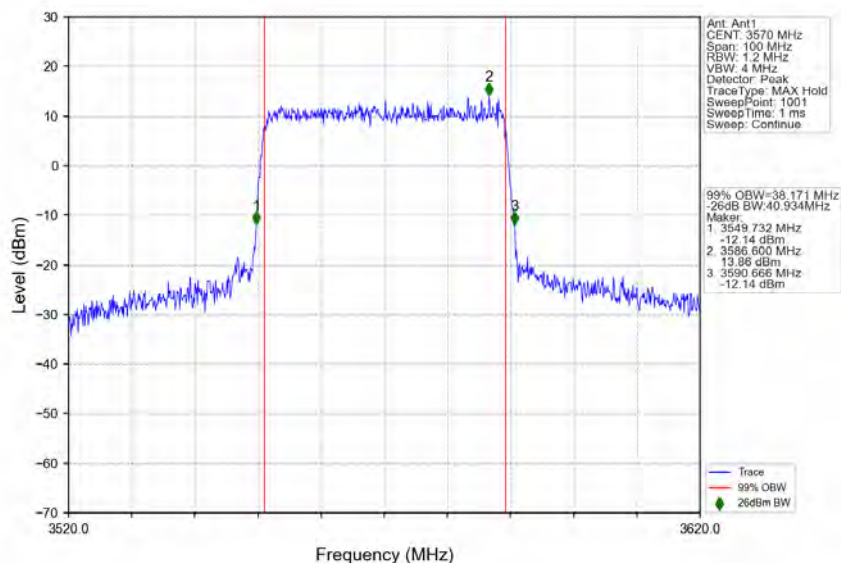
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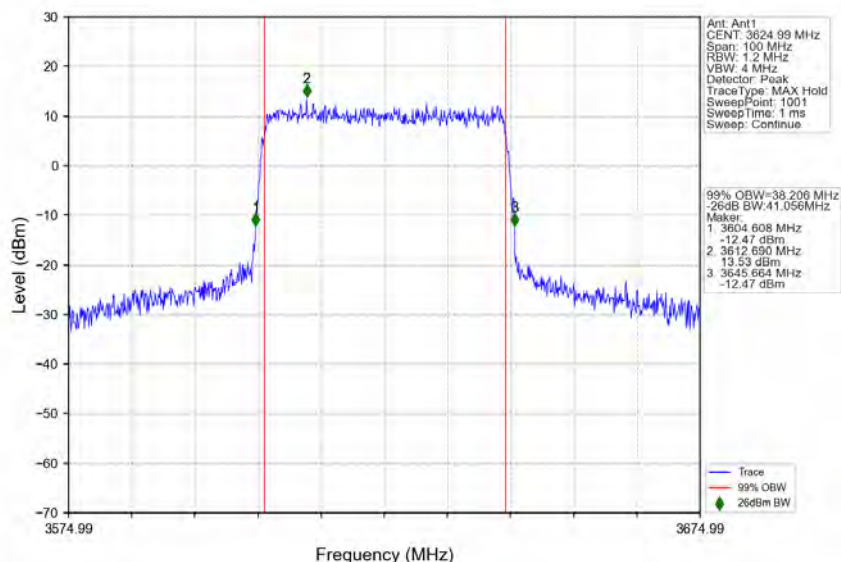
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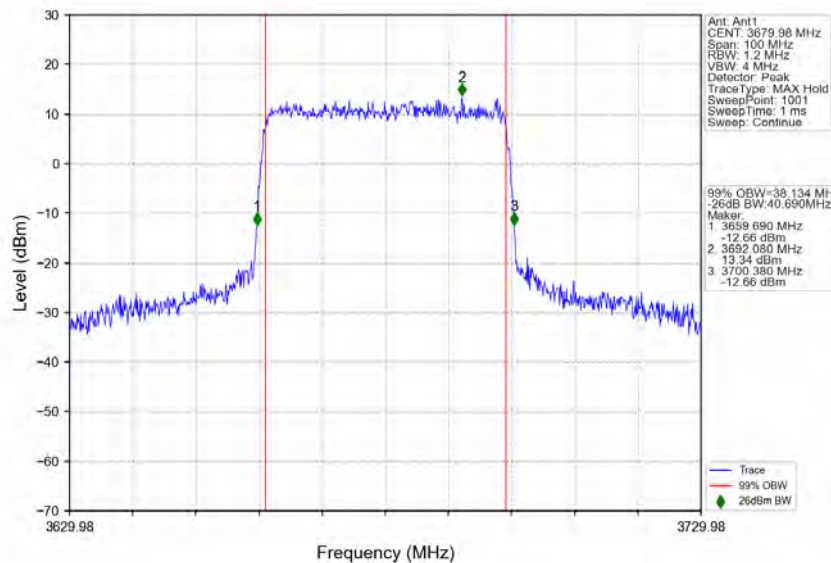
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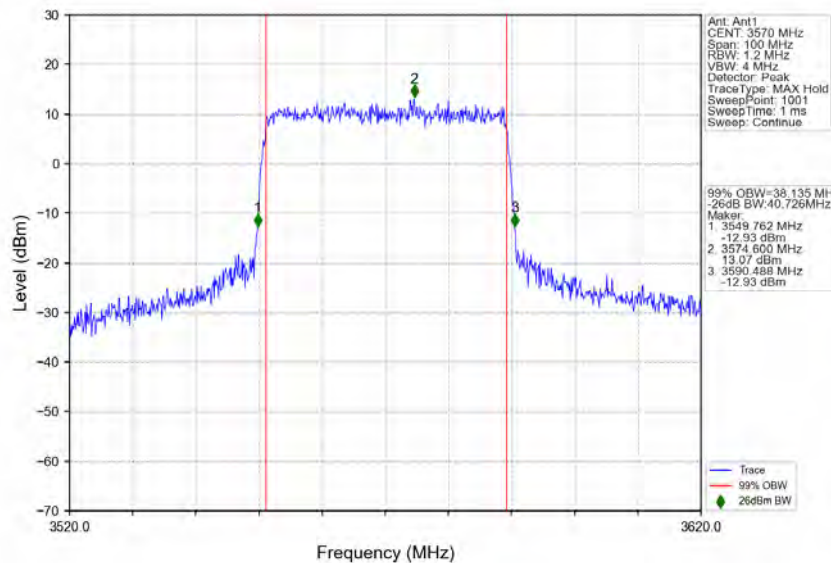
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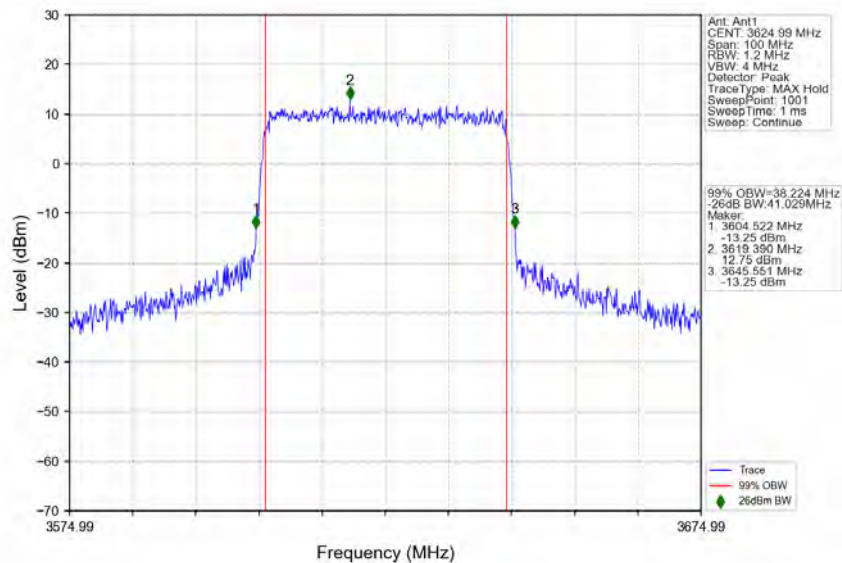
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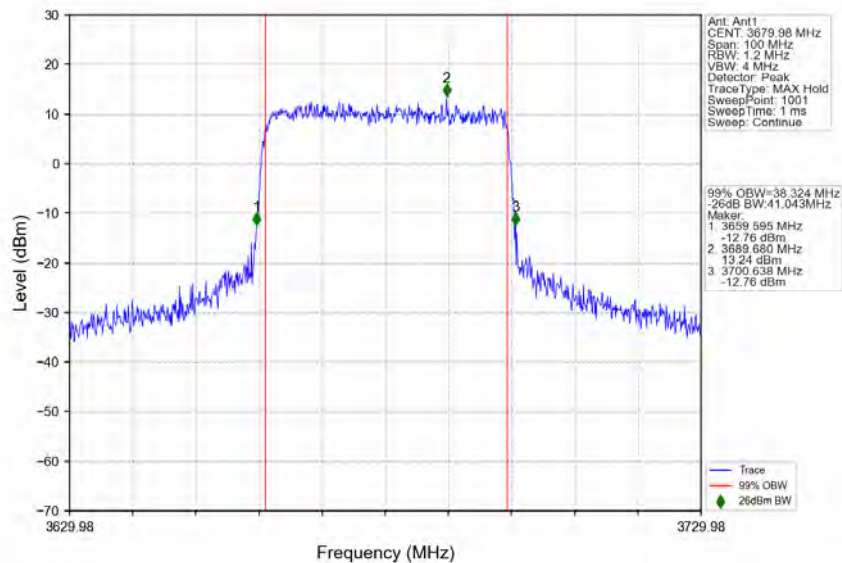
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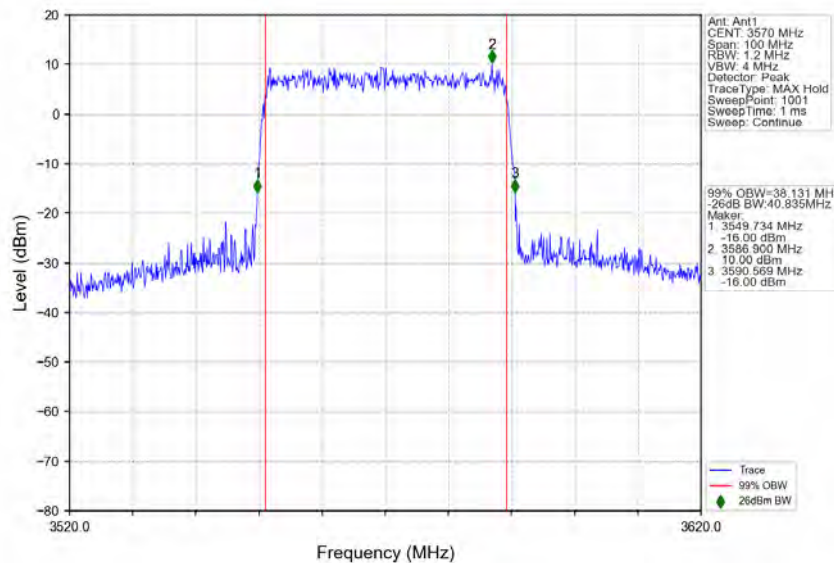
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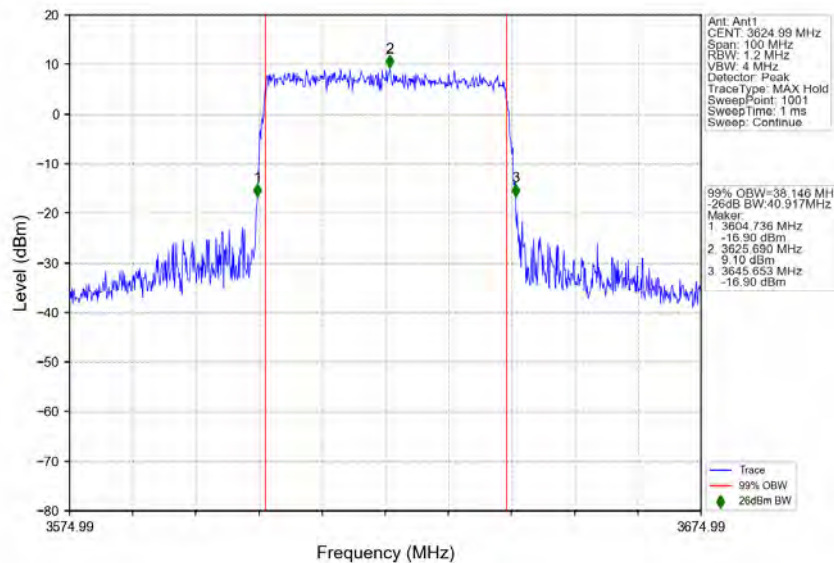
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n78d_30kHz_MIMO_NTNV_40MHz_CP-OFDM_256_QAM_3570MHz_Outer_Full



n78d_30kHz_MIMO_NTNV_40MHz_CP-OFDM_256_QAM_3624.99MHz_Outer_Full



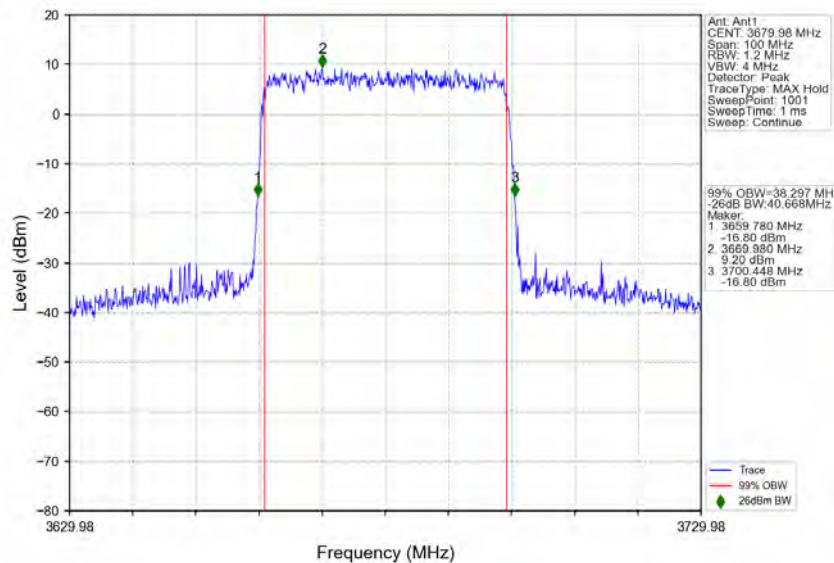
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n78d_30kHz_MIMO_NTNV_40MHz_CP-OFDM_256_QAM_3679.98MHz_Outer_Full



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4.6 30k_MIMO_50MHz_NTNV

4.6.1 Test Result

5G NR n78d SCS=30kHz MIMO 50MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
CP-OFDM QPSK	3575.01	Outer_Full	48.00	50.96	/	Pass
	3624.99	Outer_Full	47.81	50.96	/	Pass
	3675	Outer_Full	47.91	51.03	/	Pass
CP-OFDM 16 QAM	3575.01	Outer_Full	48.02	50.98	/	Pass
	3624.99	Outer_Full	47.91	51.13	/	Pass
	3675	Outer_Full	48.03	51.13	/	Pass
CP-OFDM 64 QAM	3575.01	Outer_Full	47.97	51.25	/	Pass
	3624.99	Outer_Full	48.07	51.77	/	Pass
	3675	Outer_Full	47.94	51.07	/	Pass
CP-OFDM 256 QAM	3575.01	Outer_Full	47.80	51.18	/	Pass
	3624.99	Outer_Full	47.95	50.92	/	Pass
	3675	Outer_Full	47.80	51.03	/	Pass



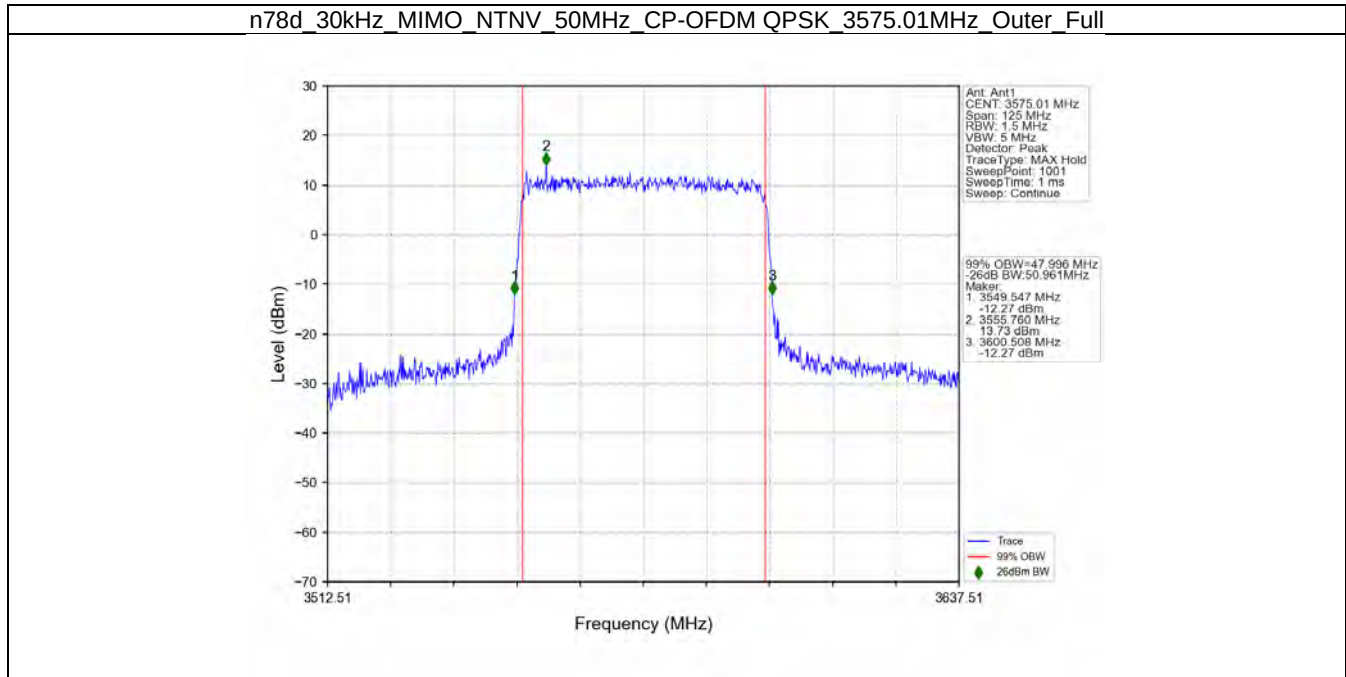
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4.6.2 Test Graph



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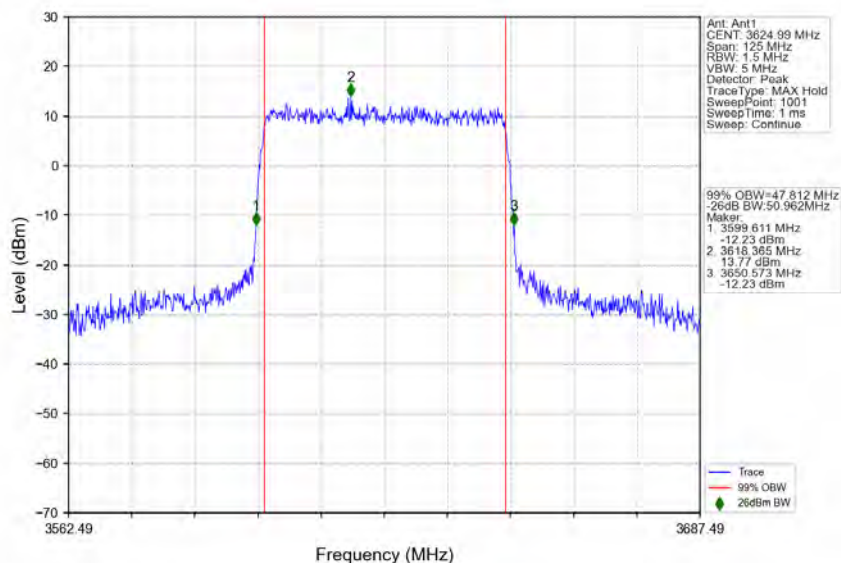
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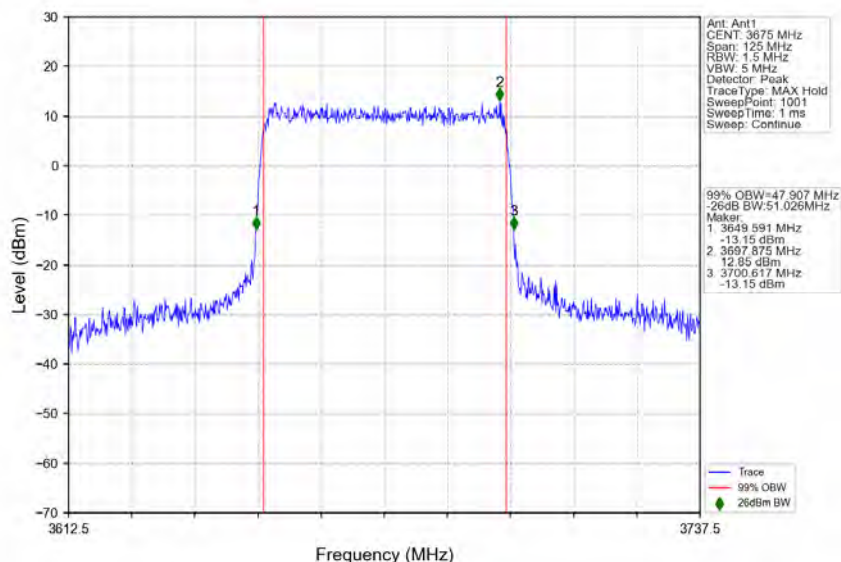
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n78d_30kHz_MIMO_NTNV_50MHz_CP-OFDM_QPSK_3624.99MHz_Outer_Full



n78d_30kHz_MIMO_NTNV_50MHz_CP-OFDM_QPSK_3675MHz_Outer_Full



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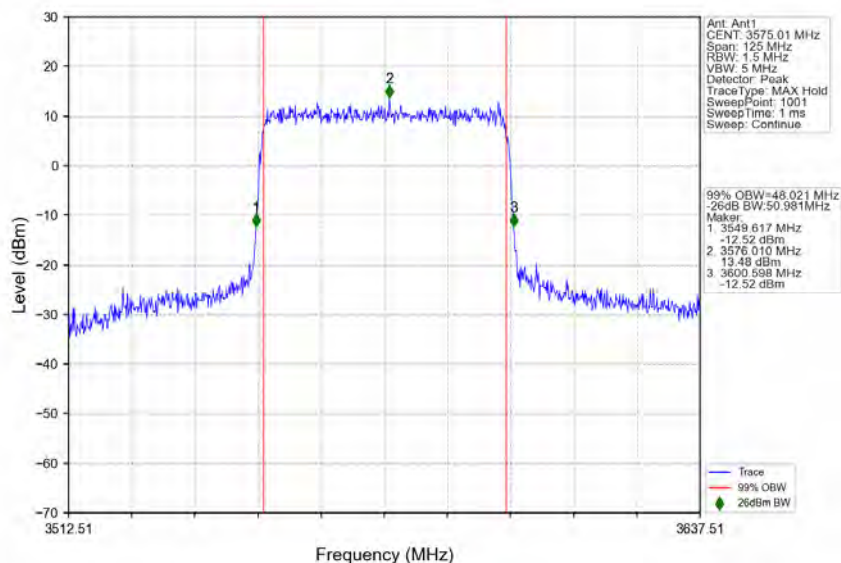
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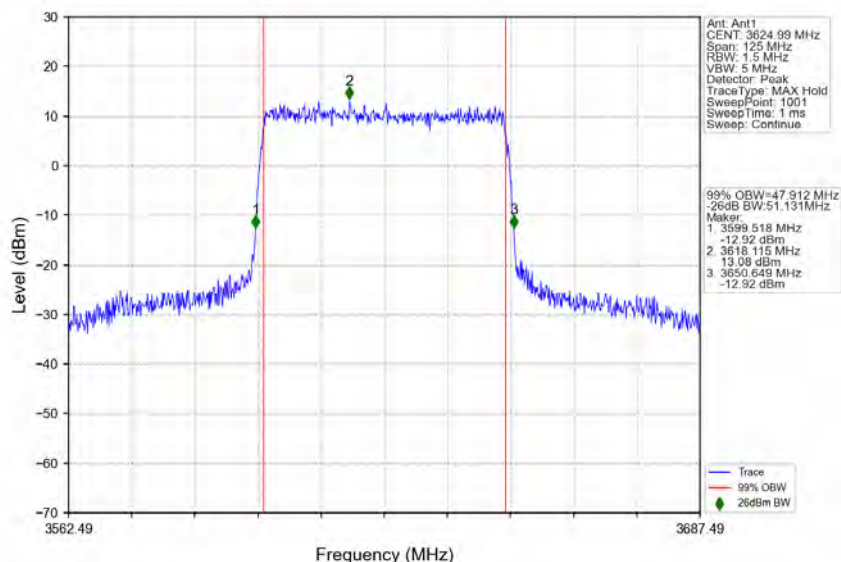
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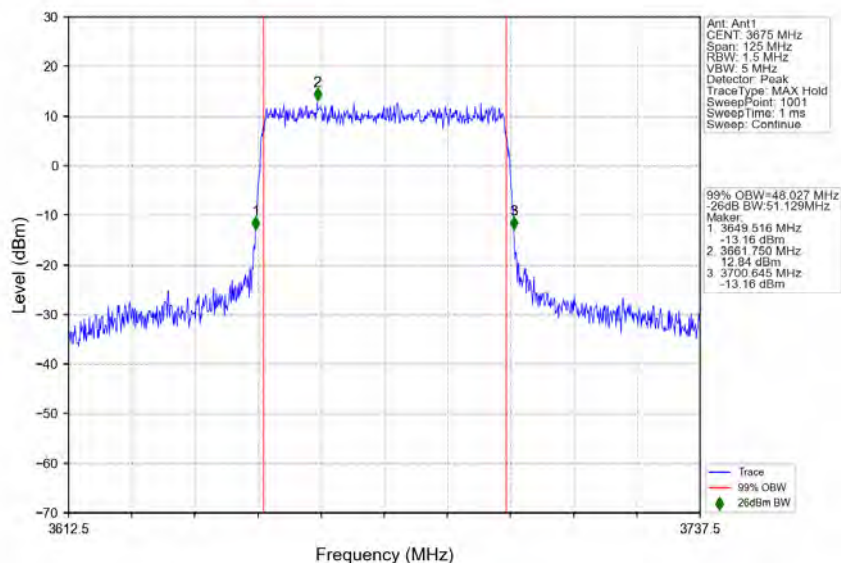
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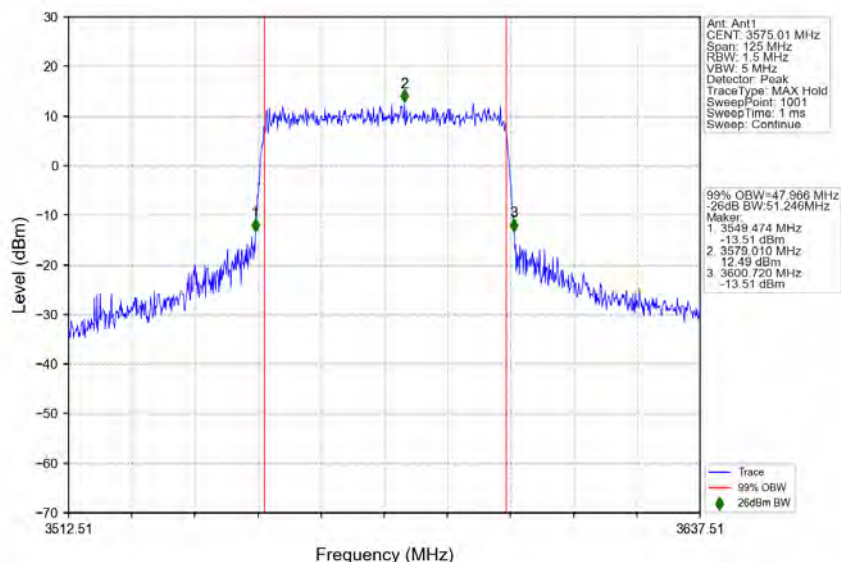
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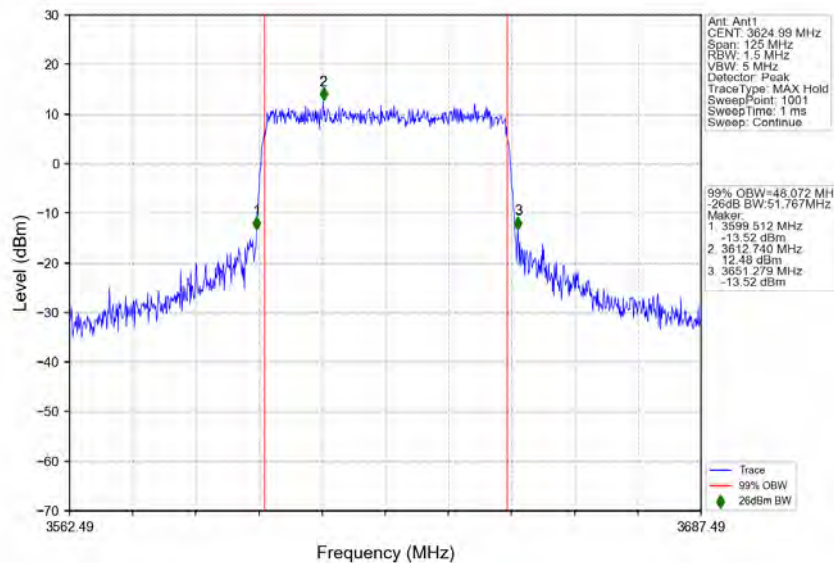
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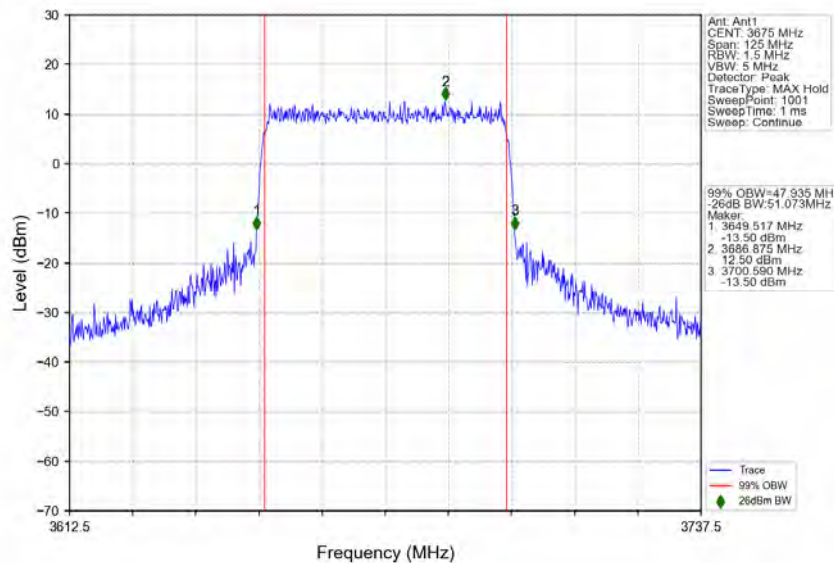
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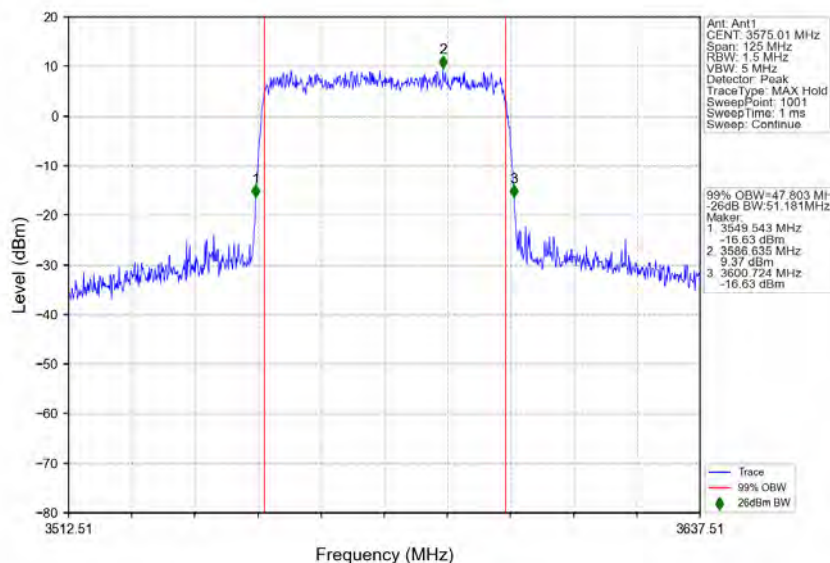
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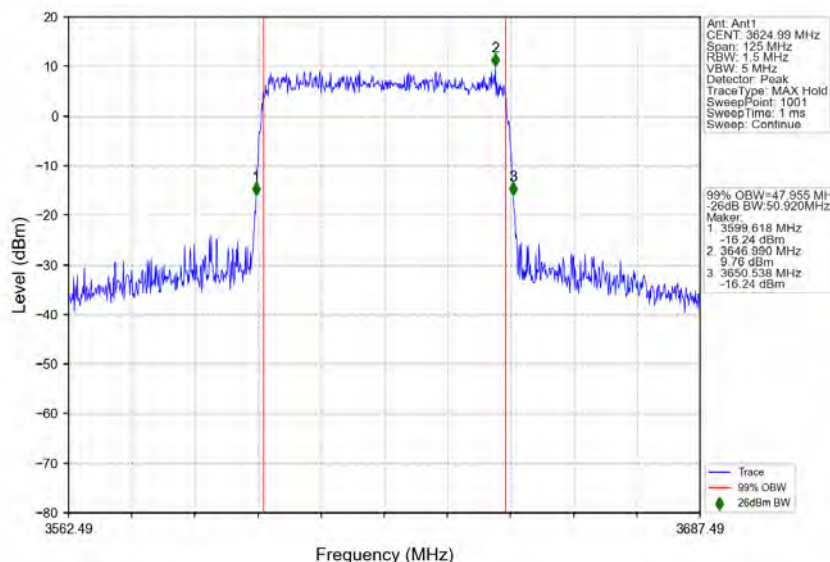
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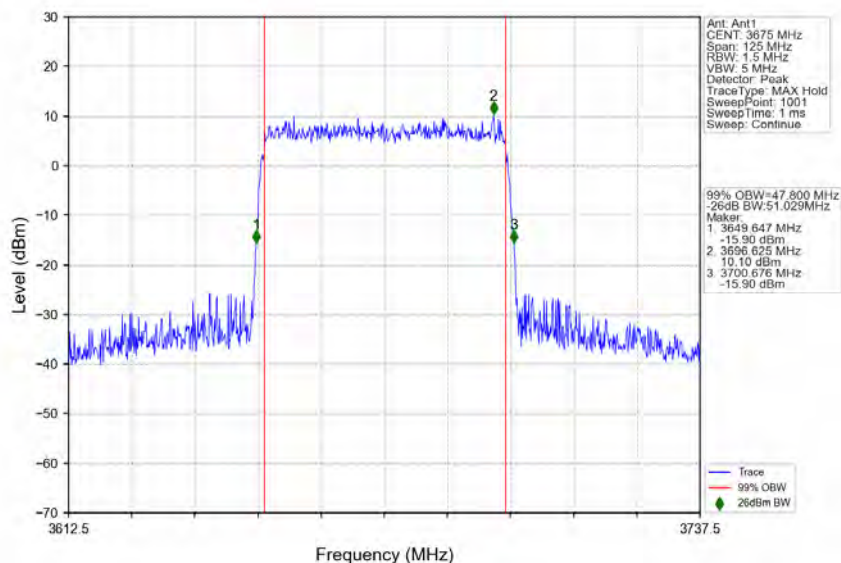
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4.7 30k_MIMO_60MHz_NTNV

4.7.1 Test Result

5G NR n78d SCS=30kHz MIMO 60MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
CP-OFDM QPSK	3580.02	Outer_Full	58.19	62.14	/	Pass
	3624.99	Outer_Full	58.21	62.24	/	Pass
	3669.99	Outer_Full	58.28	62.37	/	Pass
CP-OFDM 16 QAM	3580.02	Outer_Full	58.20	62.28	/	Pass
	3624.99	Outer_Full	58.34	62.21	/	Pass
	3669.99	Outer_Full	58.19	62.11	/	Pass
CP-OFDM 64 QAM	3580.02	Outer_Full	58.24	62.03	/	Pass
	3624.99	Outer_Full	58.41	62.33	/	Pass
	3669.99	Outer_Full	58.27	62.22	/	Pass
CP-OFDM 256 QAM	3580.02	Outer_Full	58.22	62.04	/	Pass
	3624.99	Outer_Full	58.34	62.06	/	Pass
	3669.99	Outer_Full	58.20	62.21	/	Pass



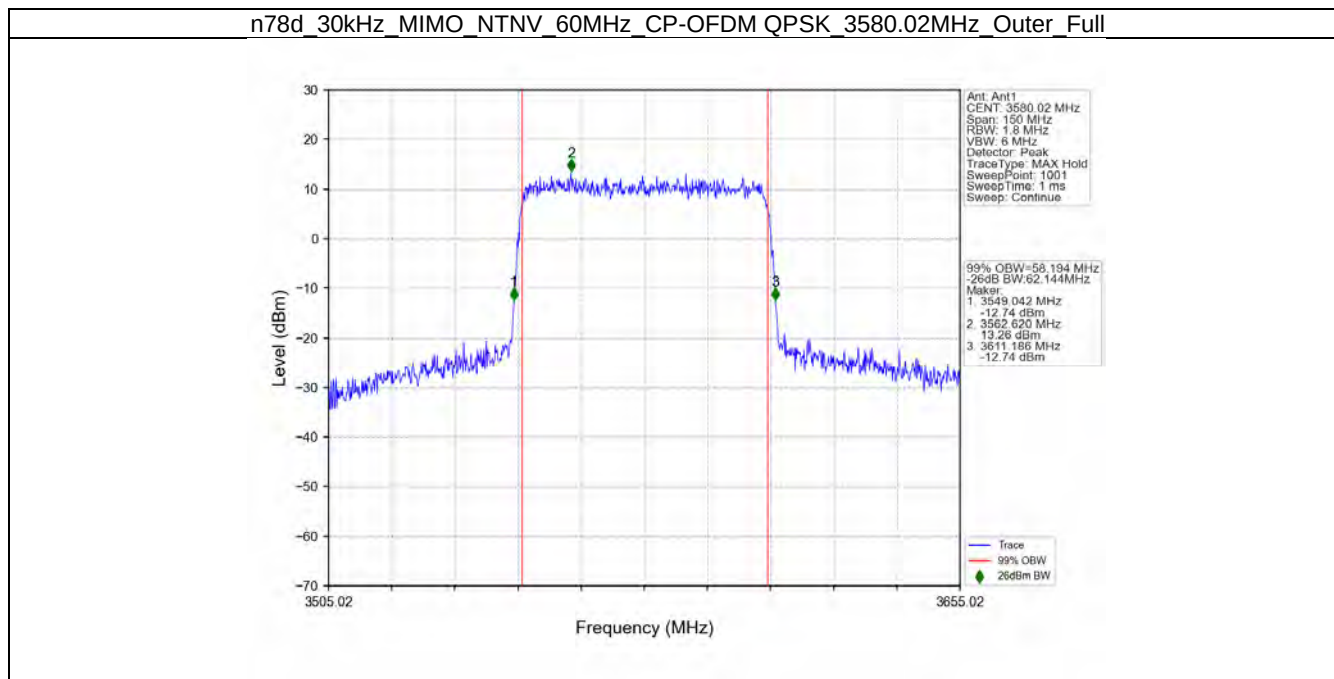
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4.7.2 Test Graph



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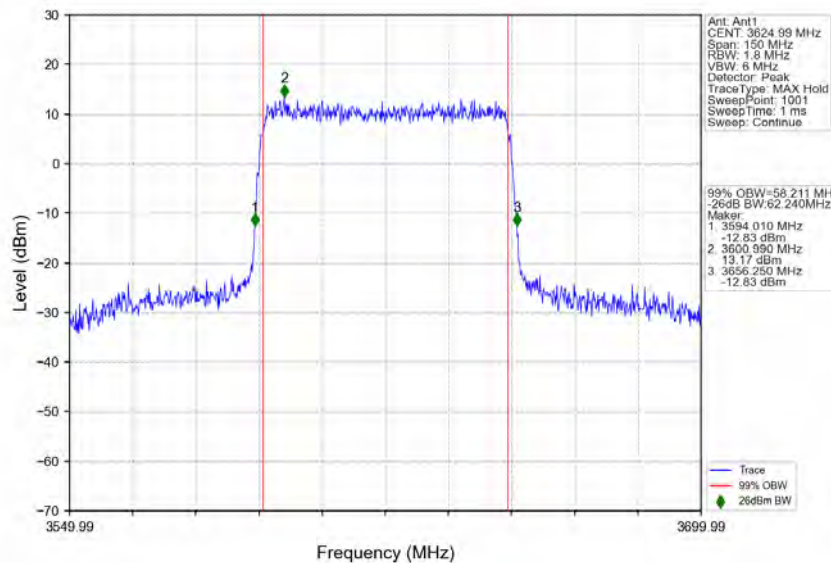
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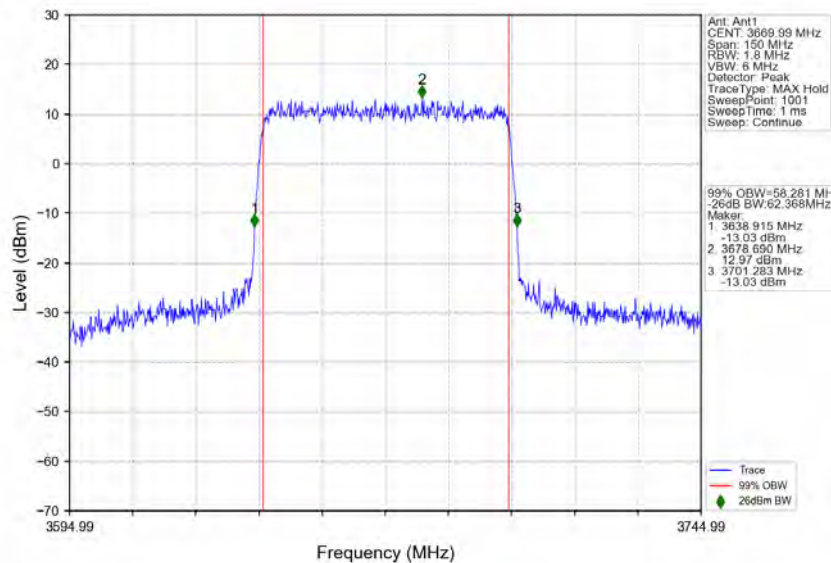
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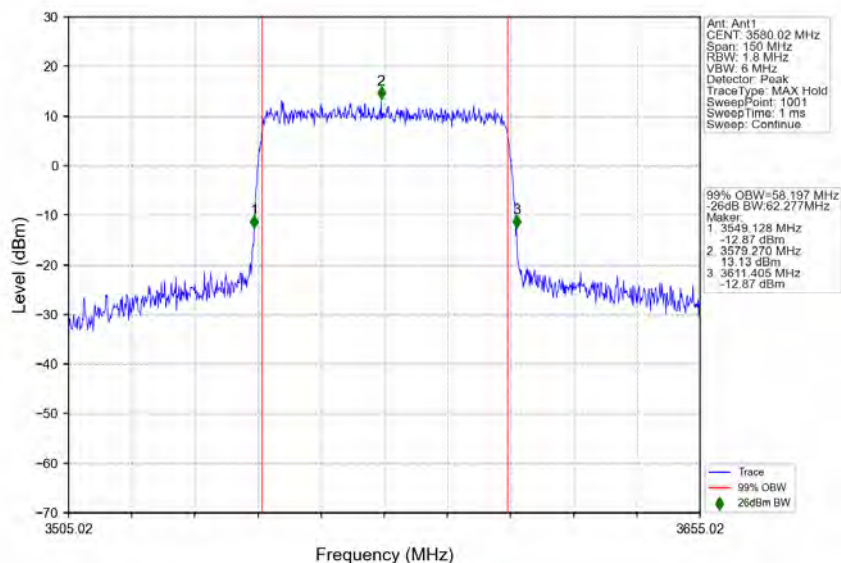
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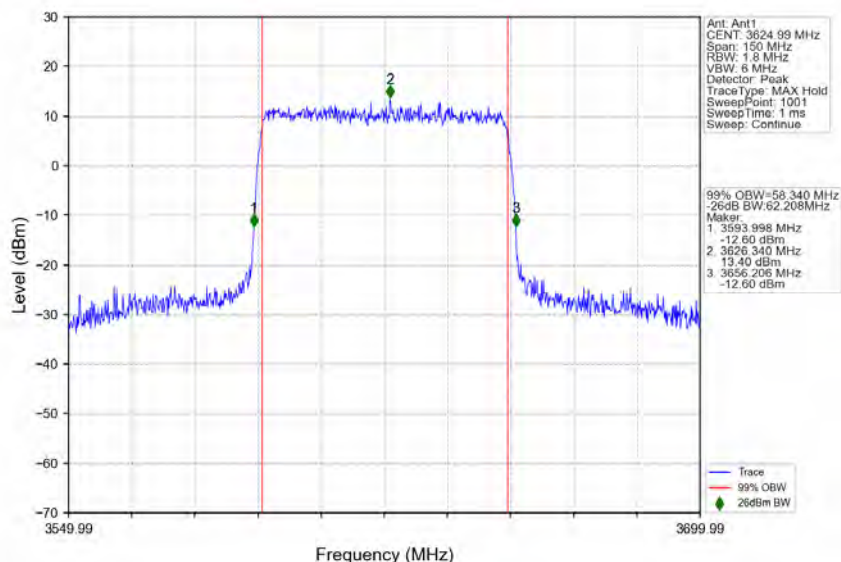
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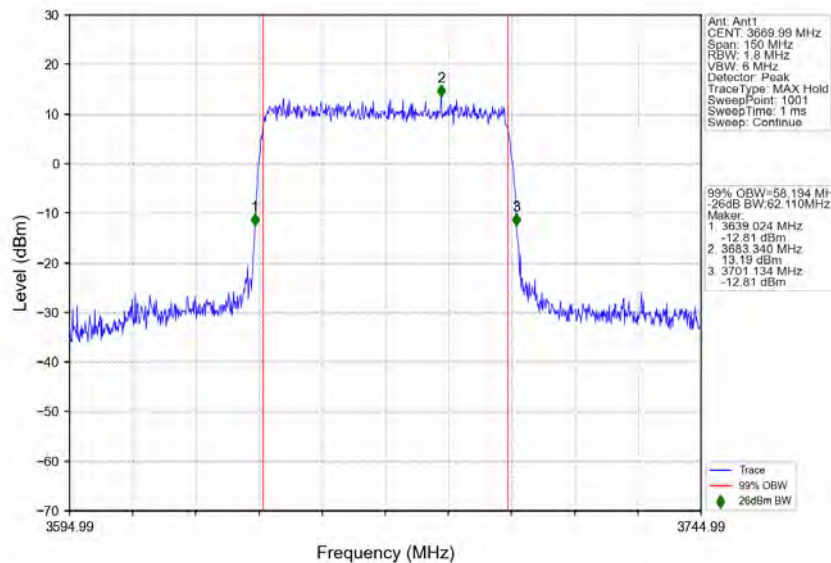
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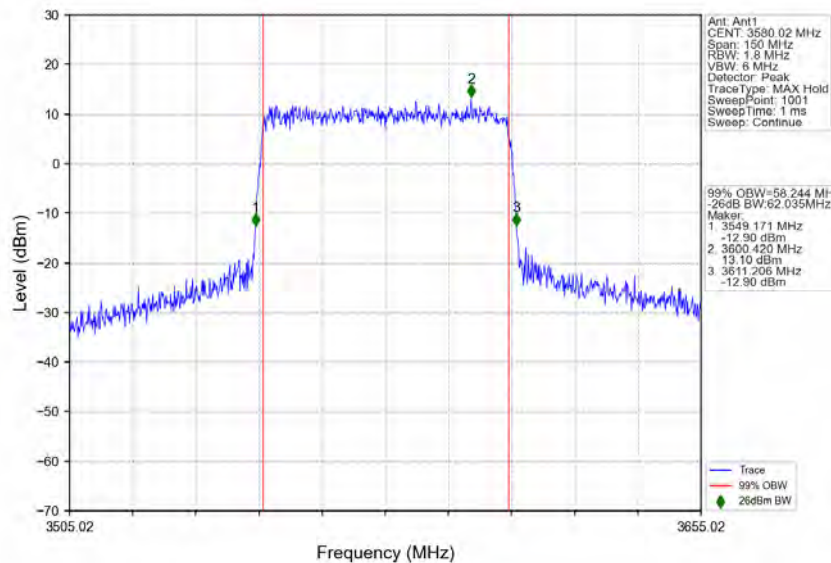
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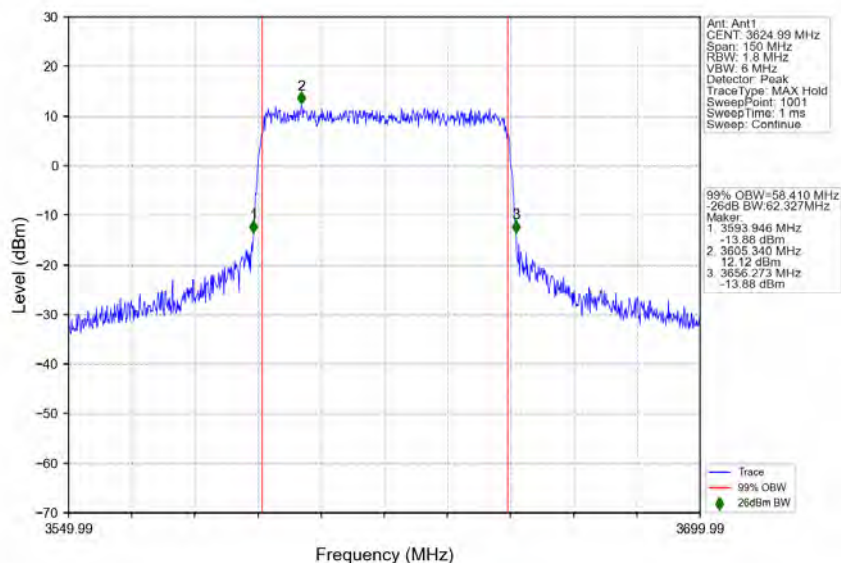
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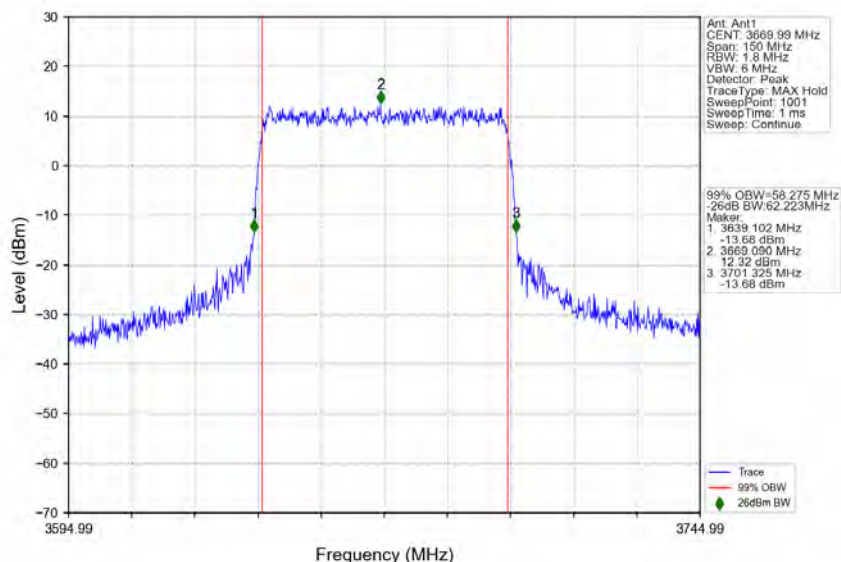
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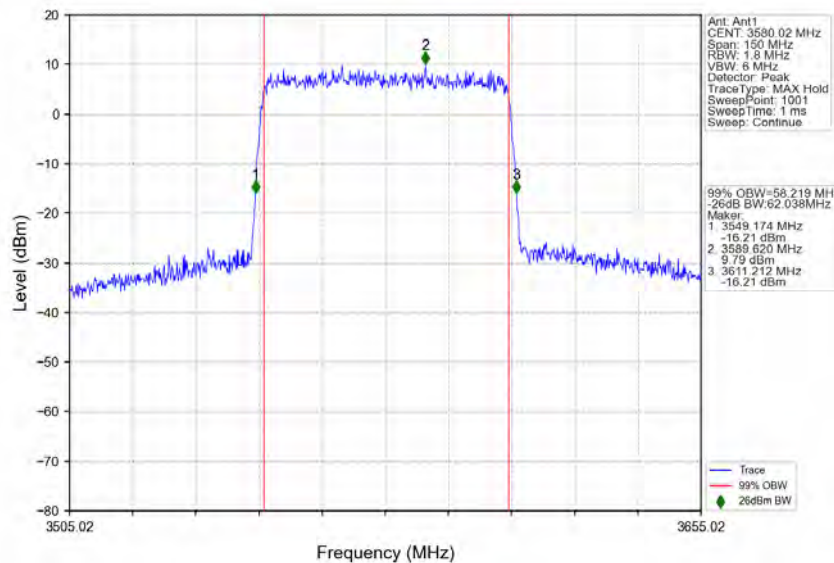
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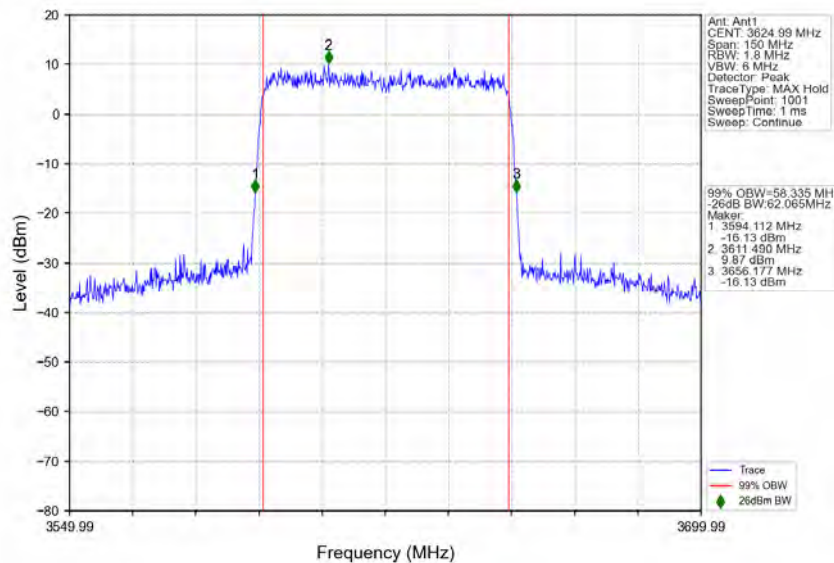
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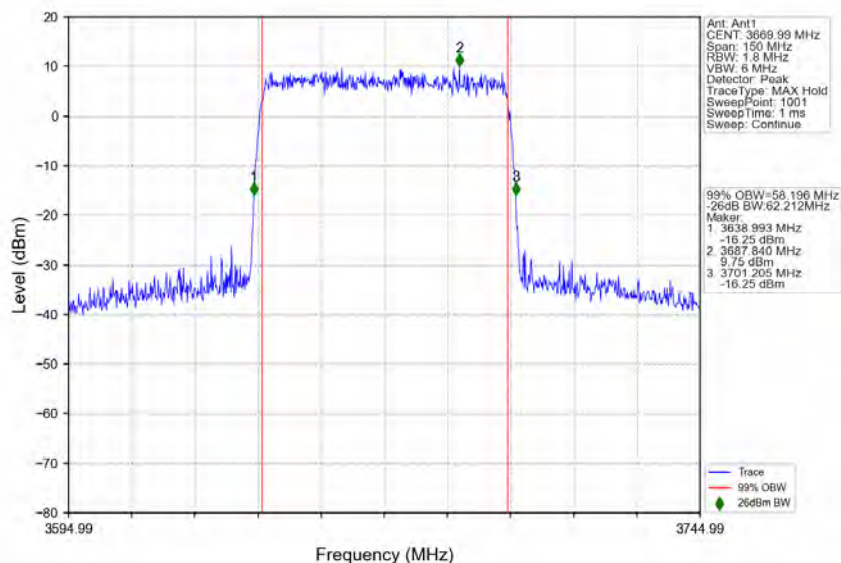
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4.8 30k_MIMO_70MHz_NTNV

4.8.1 Test Result

5G NR n78d SCS=30kHz MIMO 70MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
CP-OFDM QPSK	3585	Outer_Full	68.10	72.58	/	Pass
	3624.99	Outer_Full	68.10	73.08	/	Pass
	3664.98	Outer_Full	68.08	72.60	/	Pass
CP-OFDM 16 QAM	3585	Outer_Full	68.12	73.13	/	Pass
	3624.99	Outer_Full	68.38	76.41	/	Pass
	3664.98	Outer_Full	68.34	72.83	/	Pass
CP-OFDM 64 QAM	3585	Outer_Full	68.31	72.38	/	Pass
	3624.99	Outer_Full	68.22	74.78	/	Pass
	3664.98	Outer_Full	68.27	78.34	/	Pass
CP-OFDM 256 QAM	3585	Outer_Full	67.87	72.62	/	Pass
	3624.99	Outer_Full	68.08	72.80	/	Pass
	3664.98	Outer_Full	68.09	72.80	/	Pass



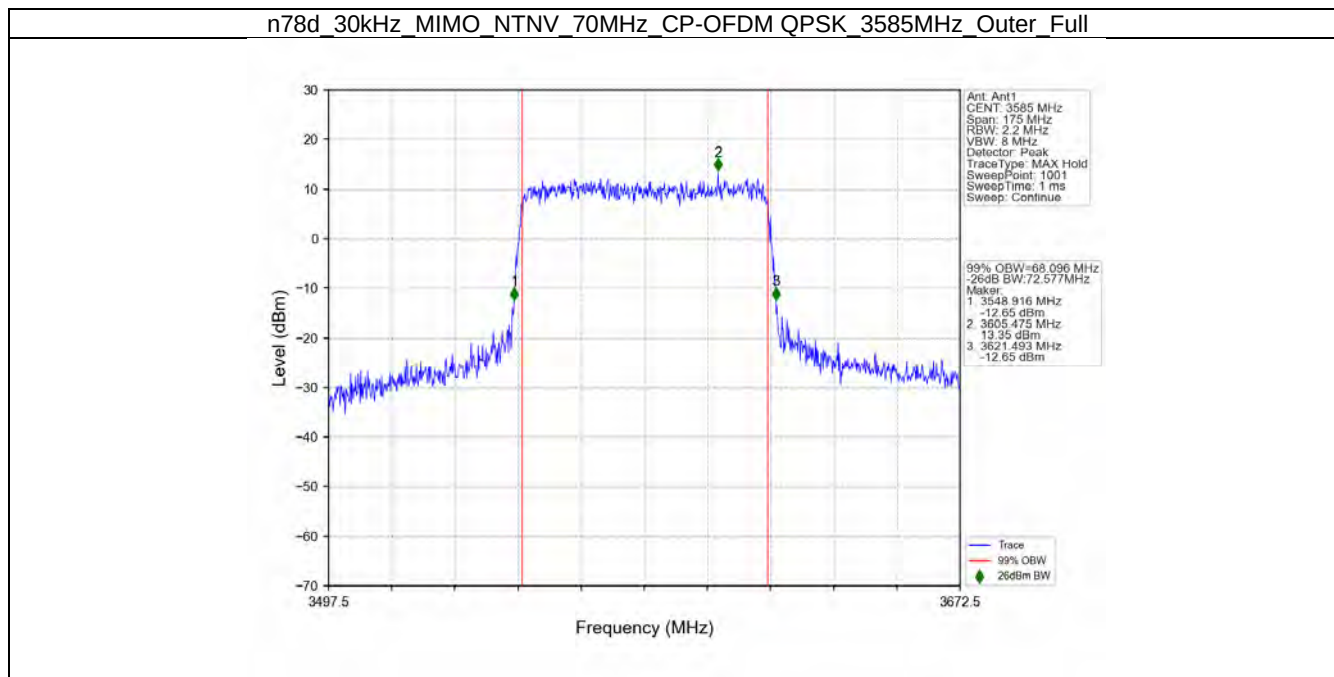
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4.8.2 Test Graph



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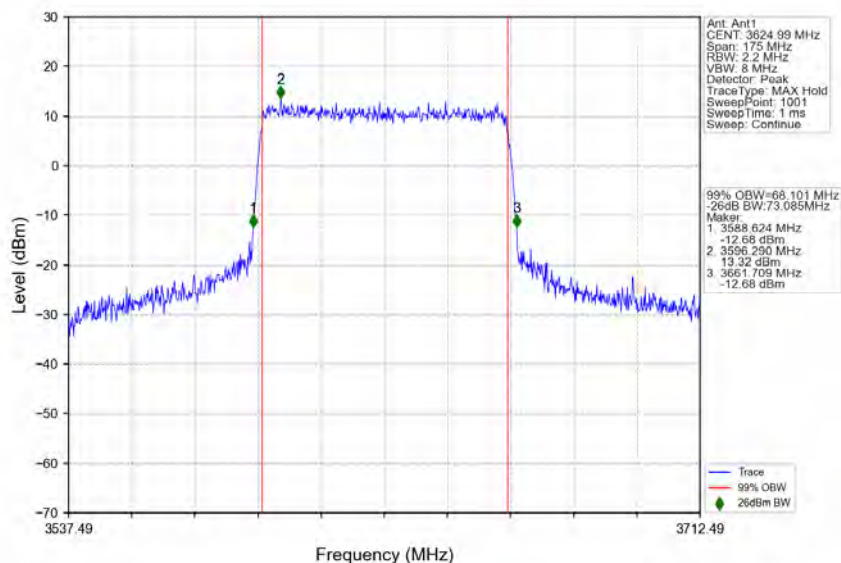
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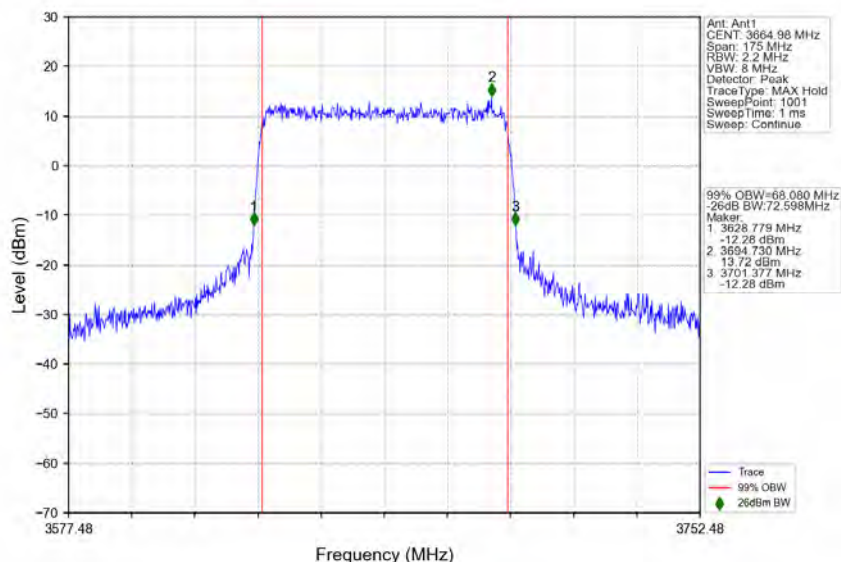
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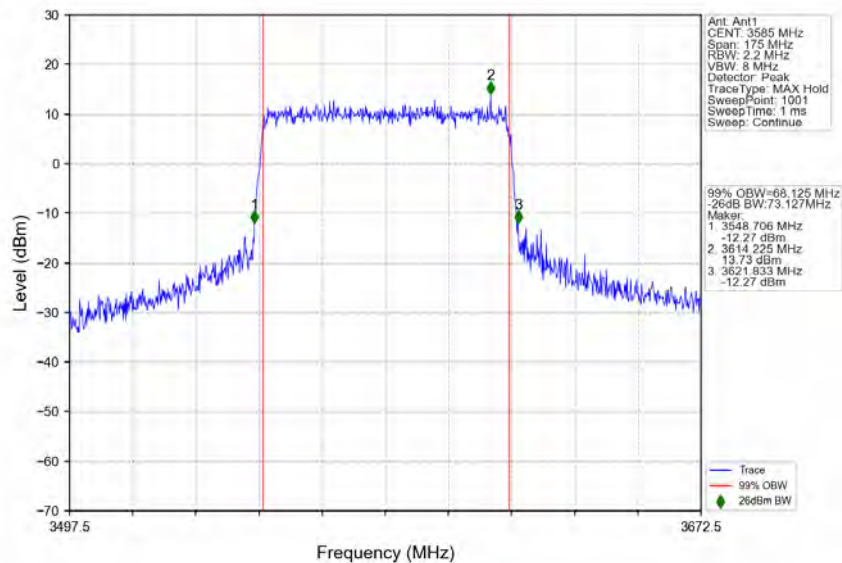


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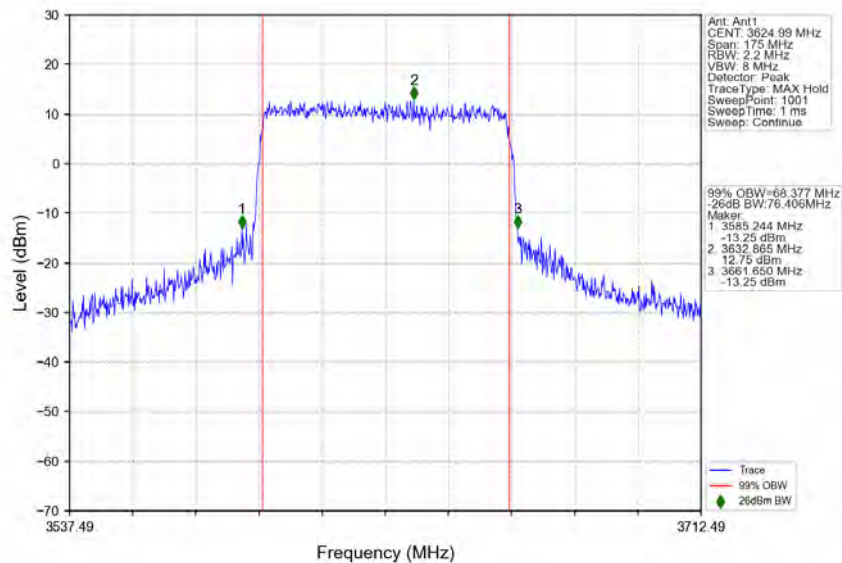
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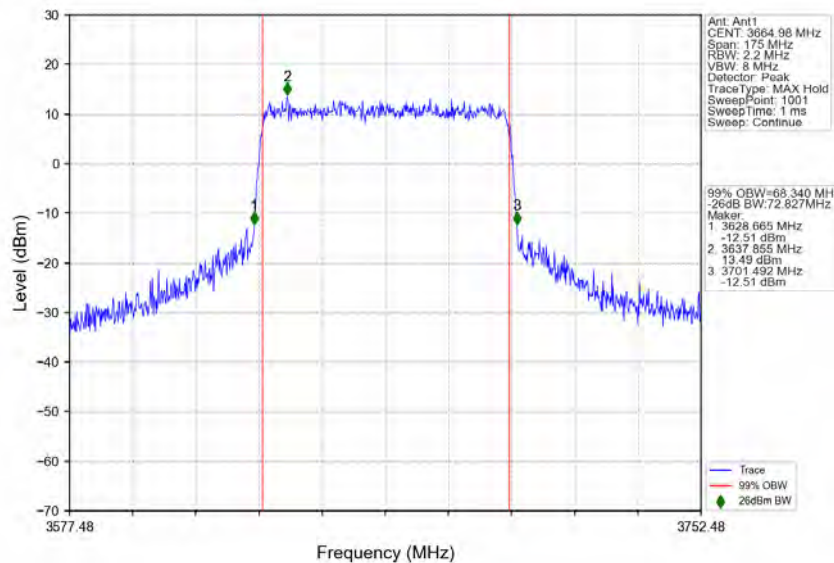
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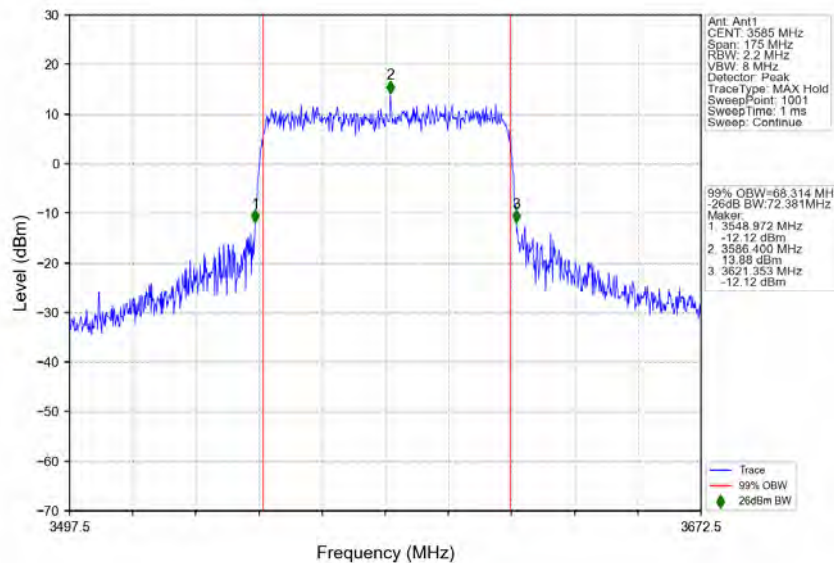
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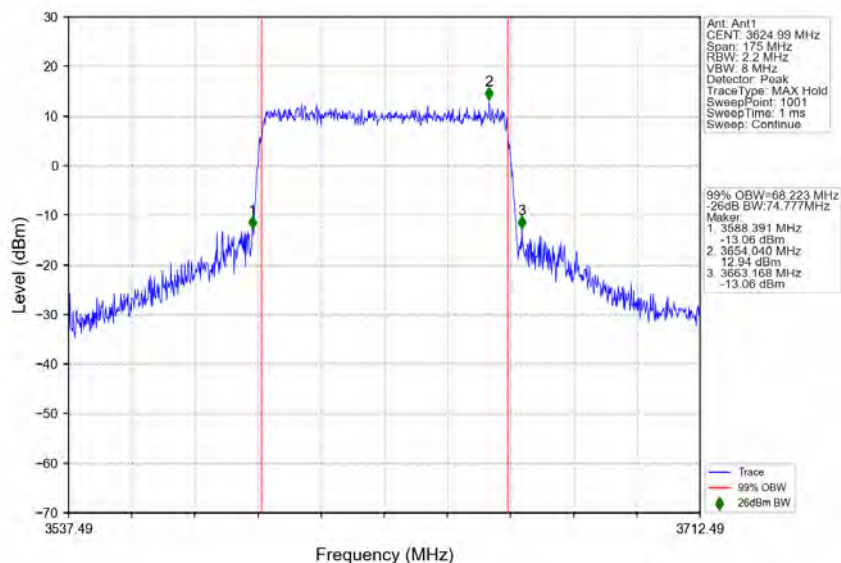
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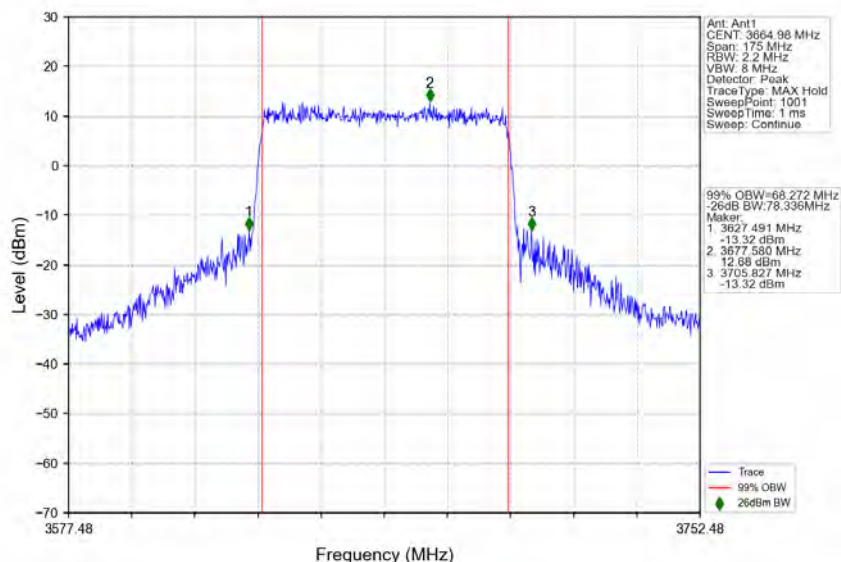
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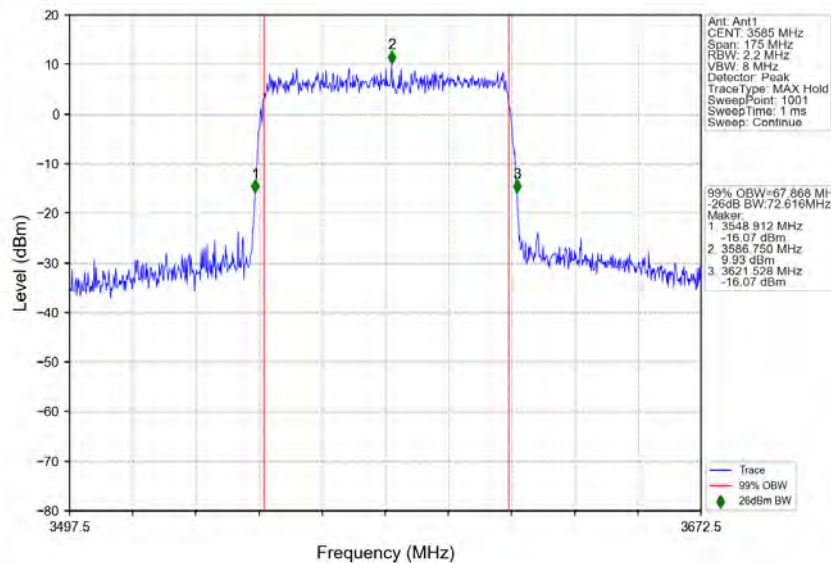
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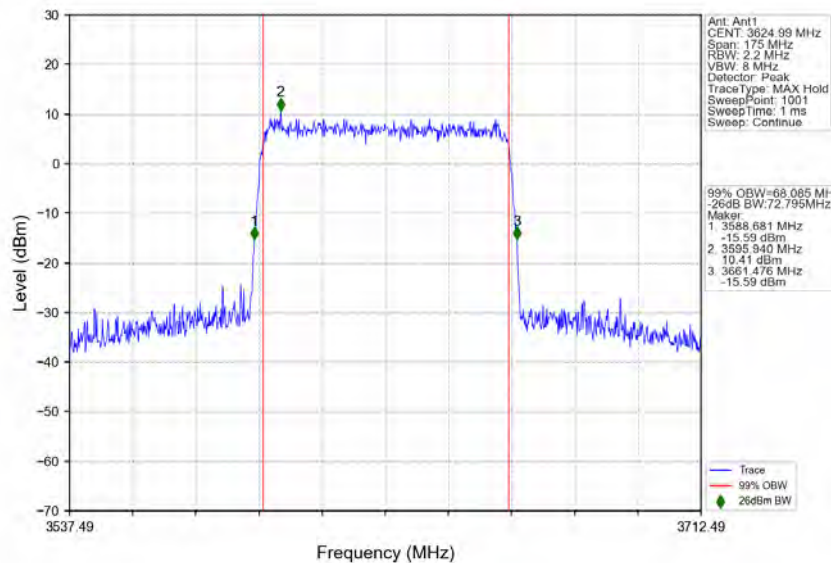
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n78d_30kHz_MIMO_NTNV_70MHz_CP-OFDM_256_QAM_3585MHz_Outer_Full



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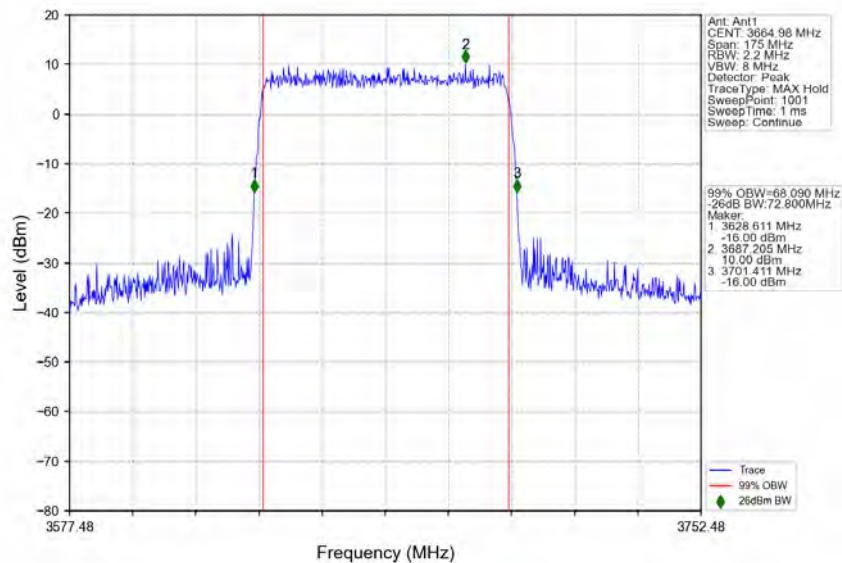
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n78d_30kHz_MIMO_NTNV_70MHz_CP-OFDM_256_QAM_3664.98MHz_Outer_Full



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4.9 30k_MIMO_80MHz_NTNV

4.9.1 Test Result

5G NR n78d SCS=30kHz MIMO 80MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
CP-OFDM QPSK	3590.01	Outer_Full	77.97	83.12	/	Pass
	3624.99	Outer_Full	77.95	83.17	/	Pass
	3660	Outer_Full	78.05	83.52	/	Pass
CP-OFDM 16 QAM	3590.01	Outer_Full	78.06	83.10	/	Pass
	3624.99	Outer_Full	78.06	83.27	/	Pass
	3660	Outer_Full	77.81	83.32	/	Pass
CP-OFDM 64 QAM	3590.01	Outer_Full	77.87	83.31	/	Pass
	3624.99	Outer_Full	78.36	83.23	/	Pass
	3660	Outer_Full	78.33	83.22	/	Pass
CP-OFDM 256 QAM	3590.01	Outer_Full	77.86	82.95	/	Pass
	3624.99	Outer_Full	78.14	83.40	/	Pass
	3660	Outer_Full	78.17	82.97	/	Pass



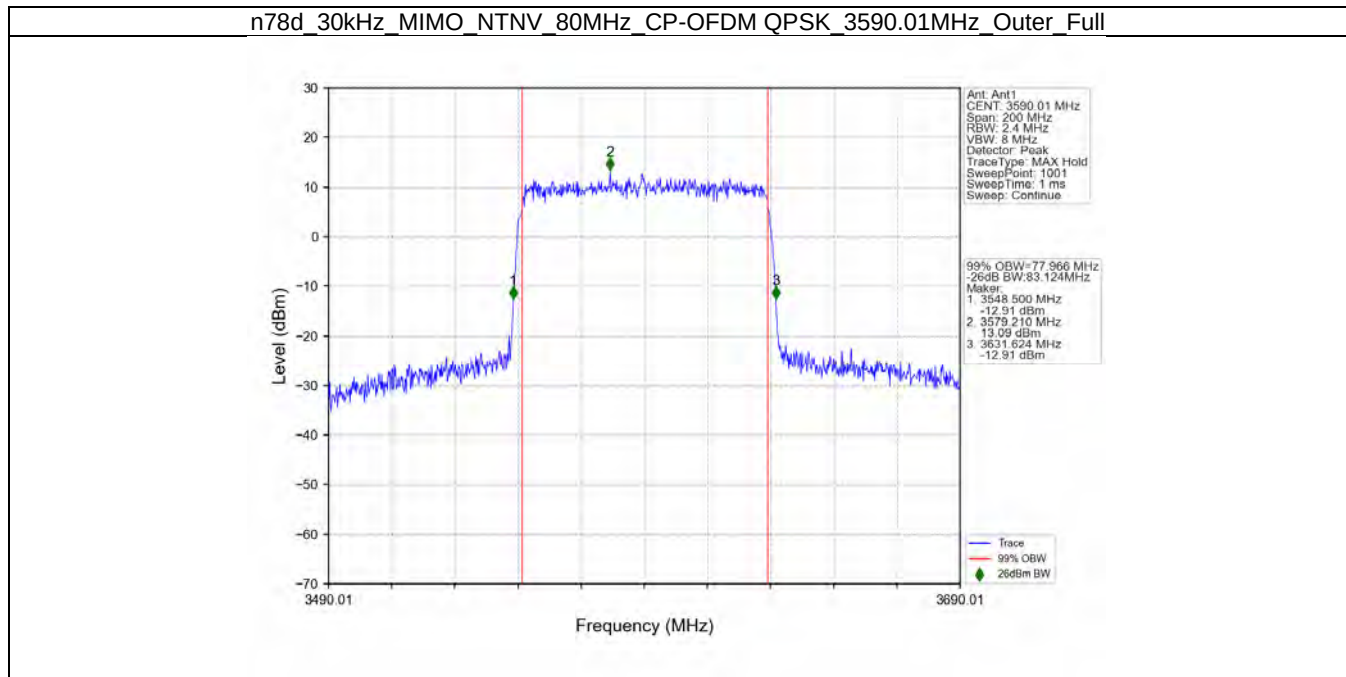
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4.9.2 Test Graph



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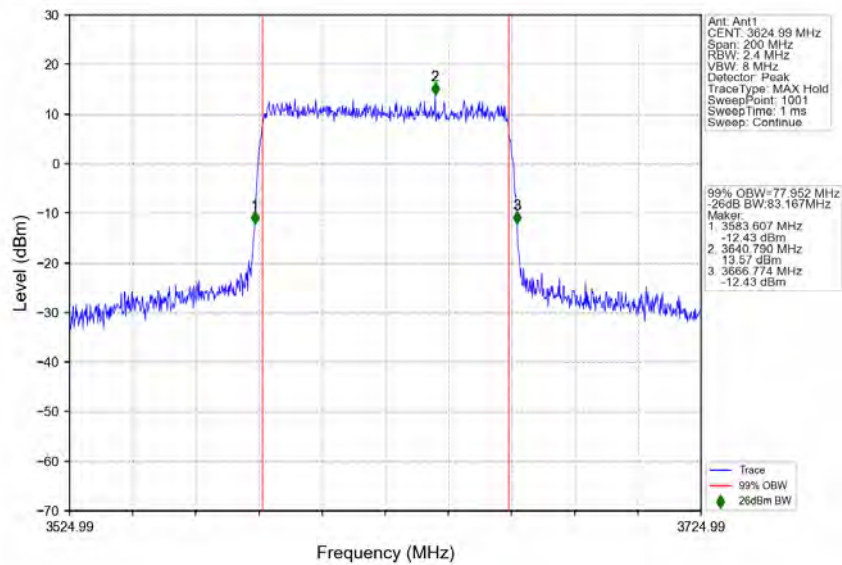
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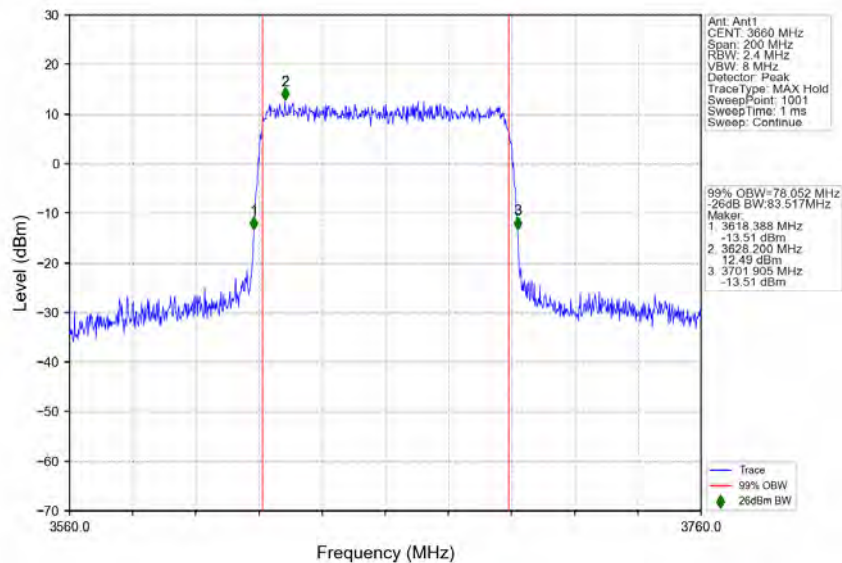
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n78d_30kHz_MIMO_NTNV_80MHz_CP-OFDM QPSK_3624.99MHz_Outer_Full



n78d_30kHz_MIMO_NTNV_80MHz_CP-OFDM QPSK_3660MHz_Outer_Full



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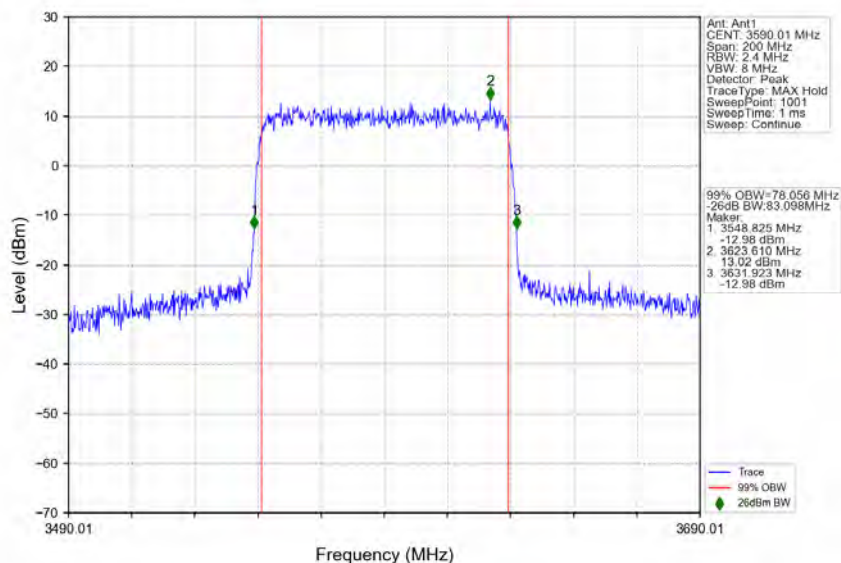
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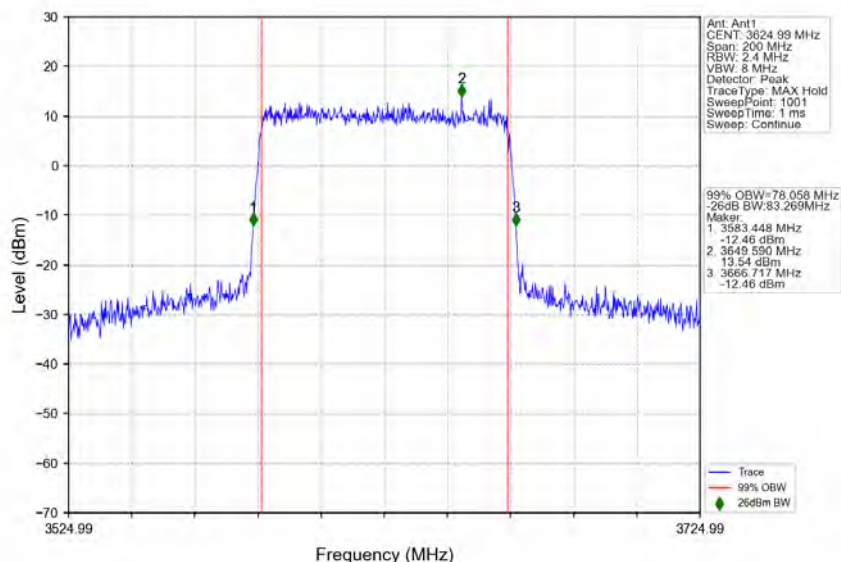
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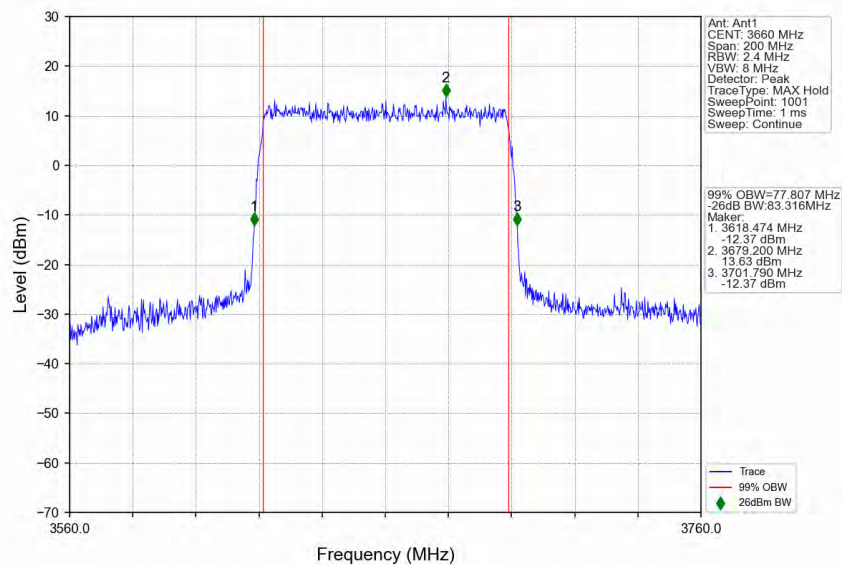
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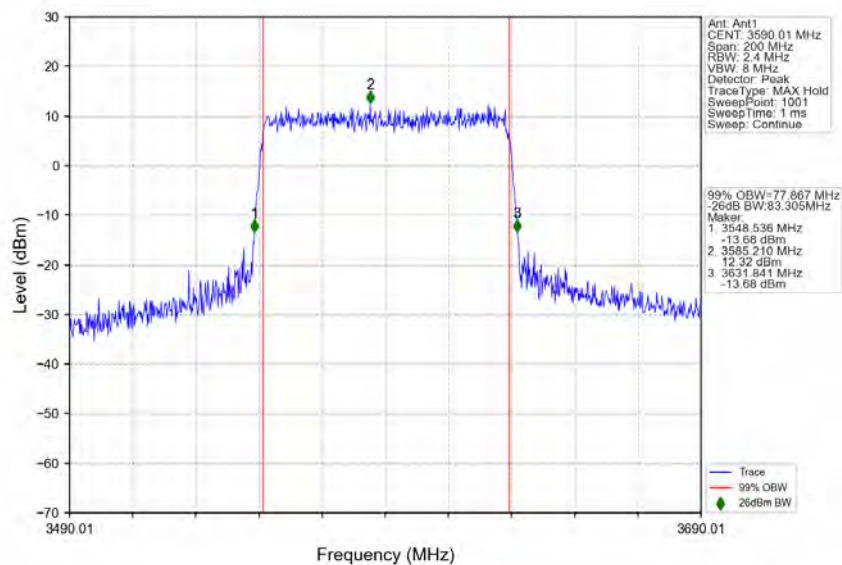
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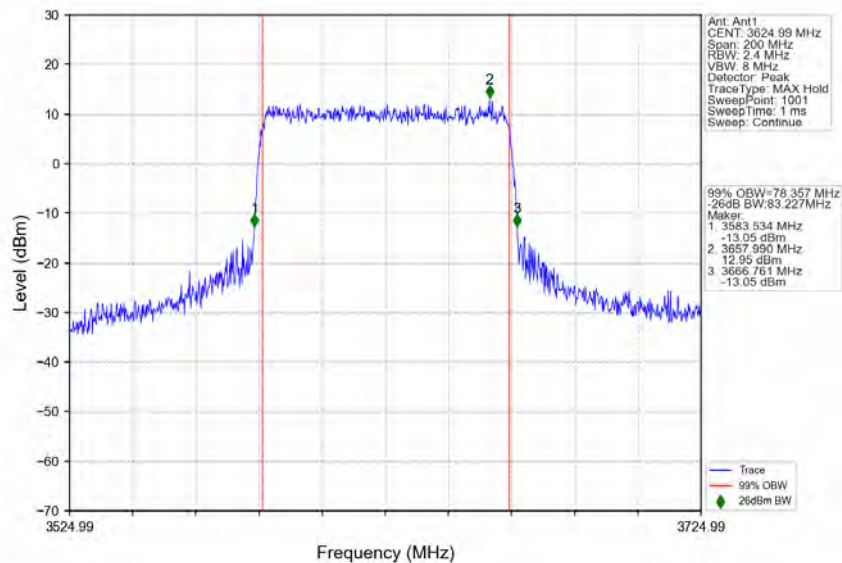
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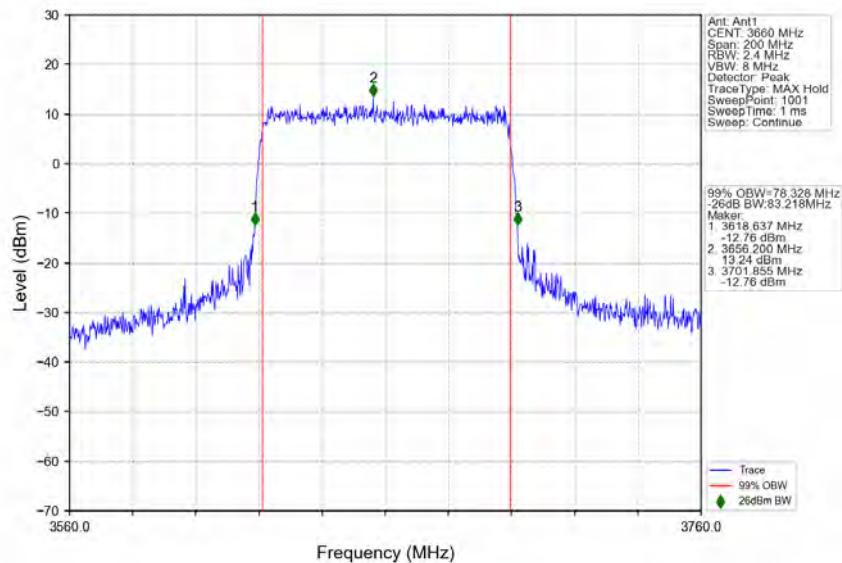
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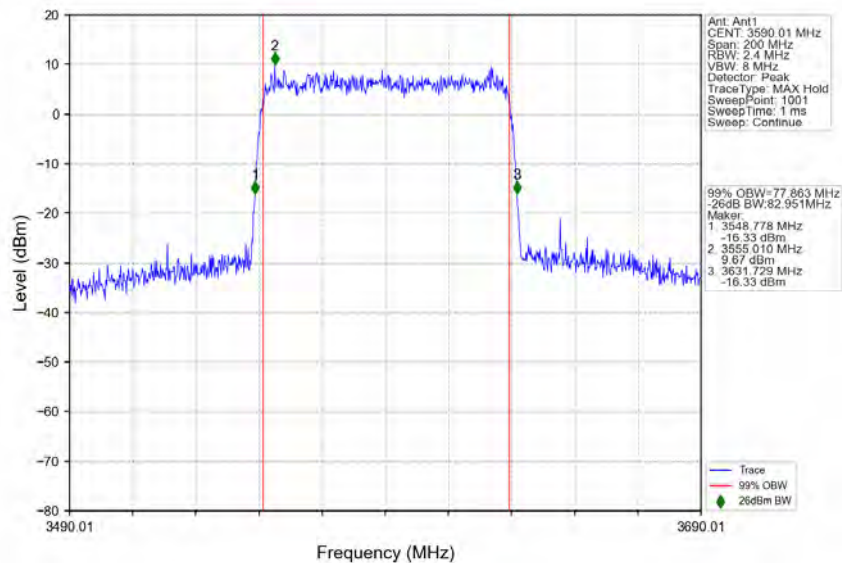
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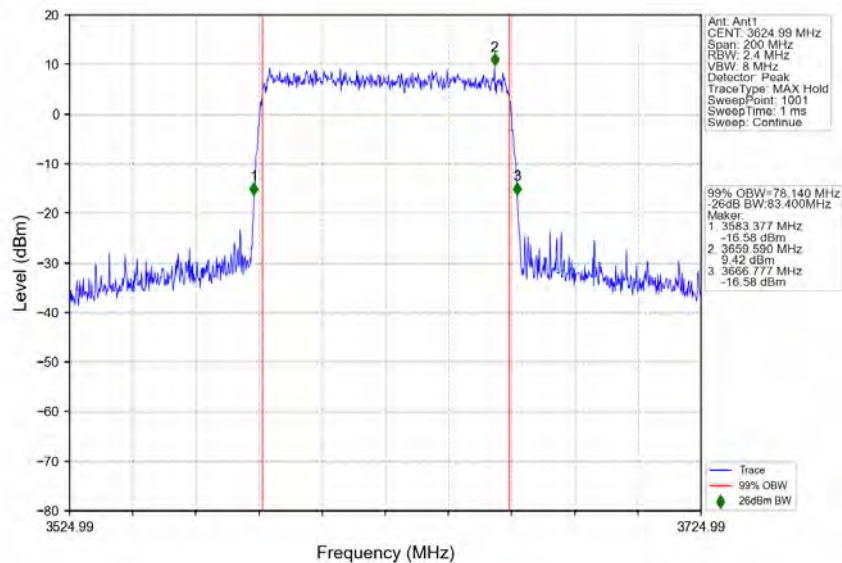
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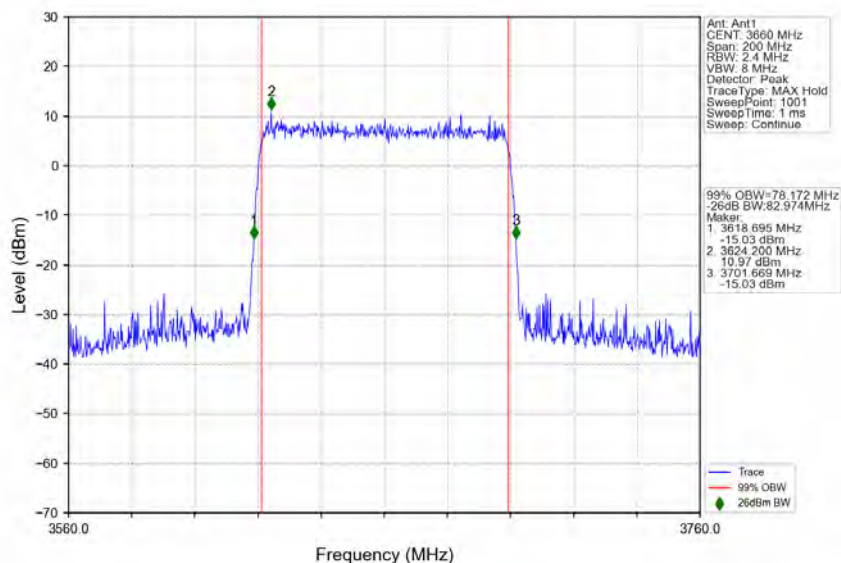
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4.10 30k_MIMO_90MHz_NTNV

4.10.1 Test Result

5G NR n78d SCS=30kHz MIMO 90MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
CP-OFDM QPSK	3595.02	Outer_Full	88.14	93.83	/	Pass
	3624.99	Outer_Full	87.97	93.85	/	Pass
	3654.99	Outer_Full	88.19	93.96	/	Pass
CP-OFDM 16 QAM	3595.02	Outer_Full	87.92	93.61	/	Pass
	3624.99	Outer_Full	88.19	93.78	/	Pass
	3654.99	Outer_Full	88.05	93.75	/	Pass
CP-OFDM 64 QAM	3595.02	Outer_Full	88.19	93.95	/	Pass
	3624.99	Outer_Full	88.03	94.00	/	Pass
	3654.99	Outer_Full	88.08	93.85	/	Pass
CP-OFDM 256 QAM	3595.02	Outer_Full	88.18	93.86	/	Pass
	3624.99	Outer_Full	88.46	93.77	/	Pass
	3654.99	Outer_Full	88.12	93.78	/	Pass



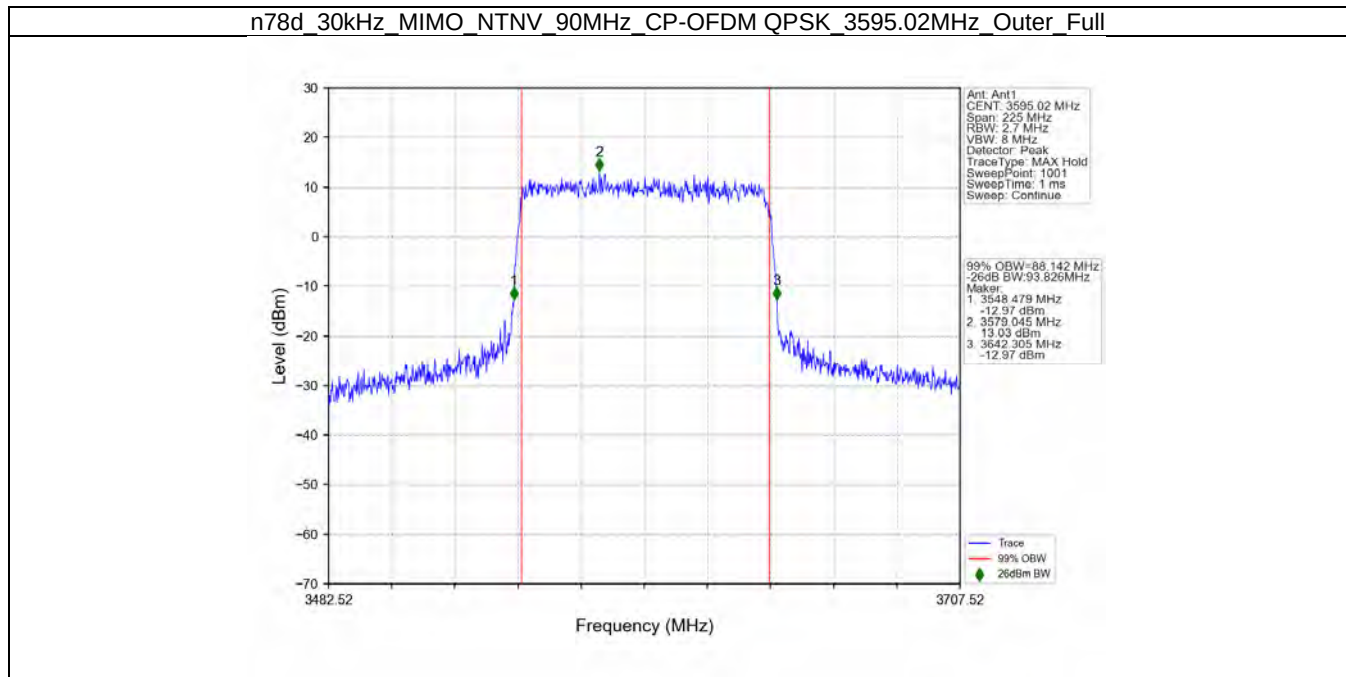
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4.10.2 Test Graph



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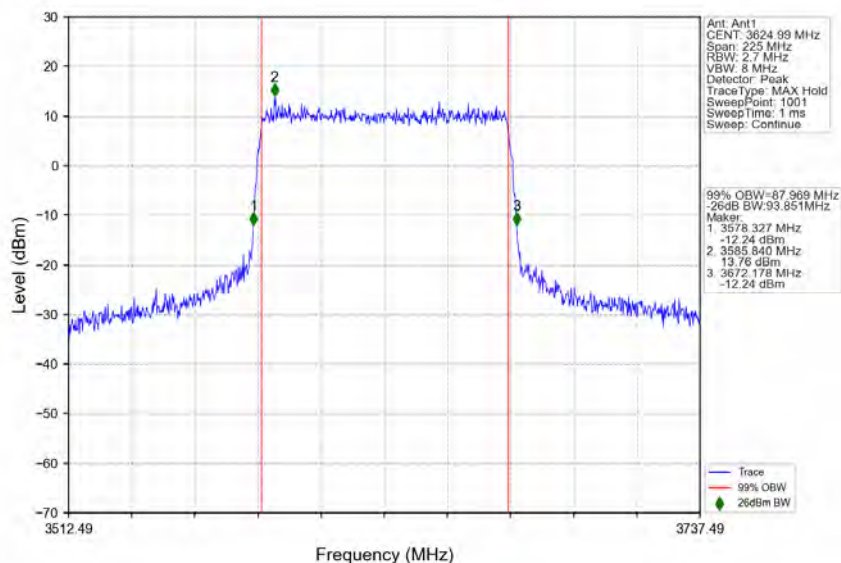
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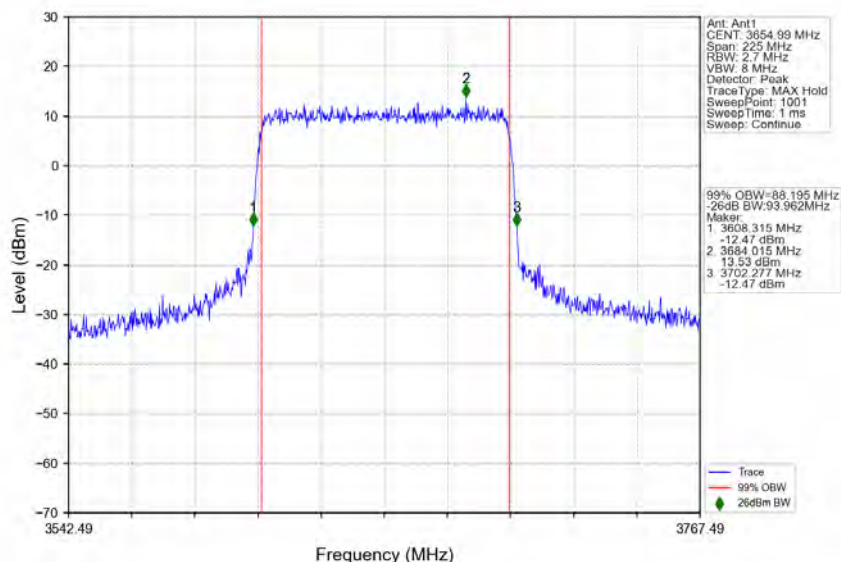
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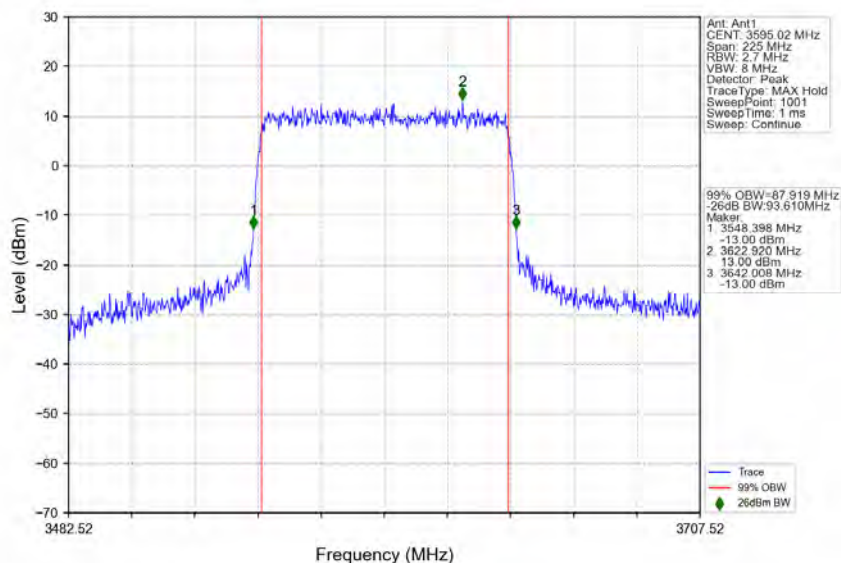
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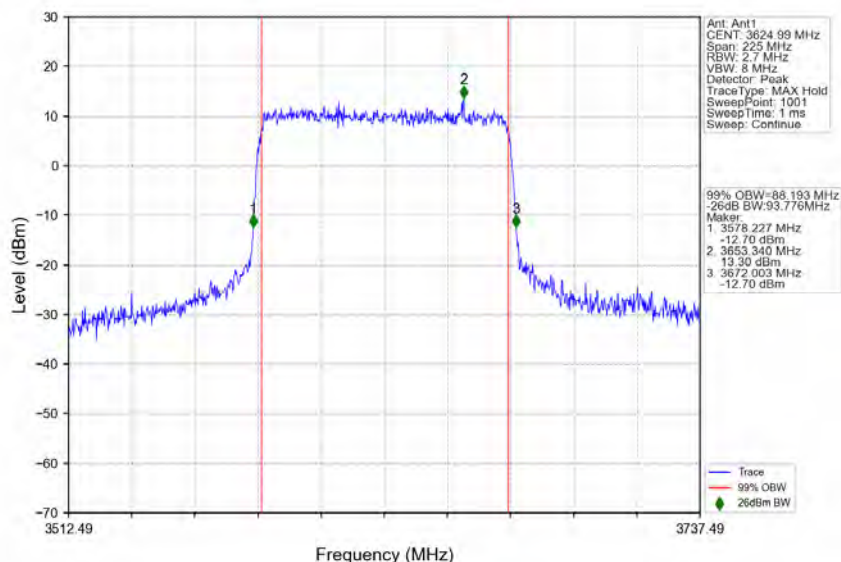
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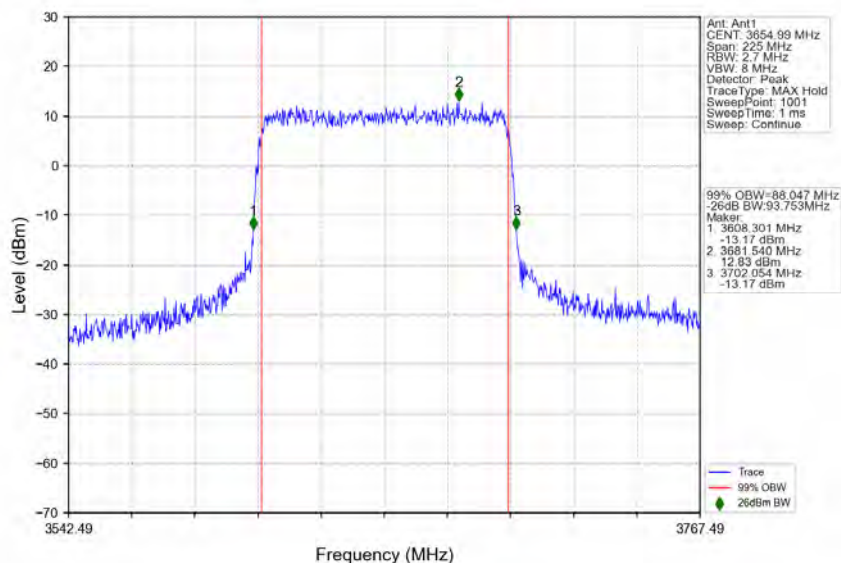
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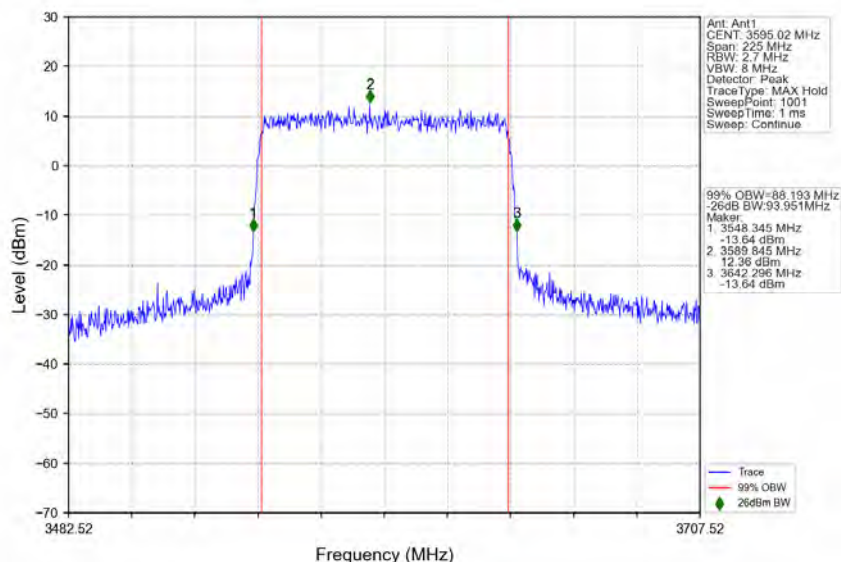
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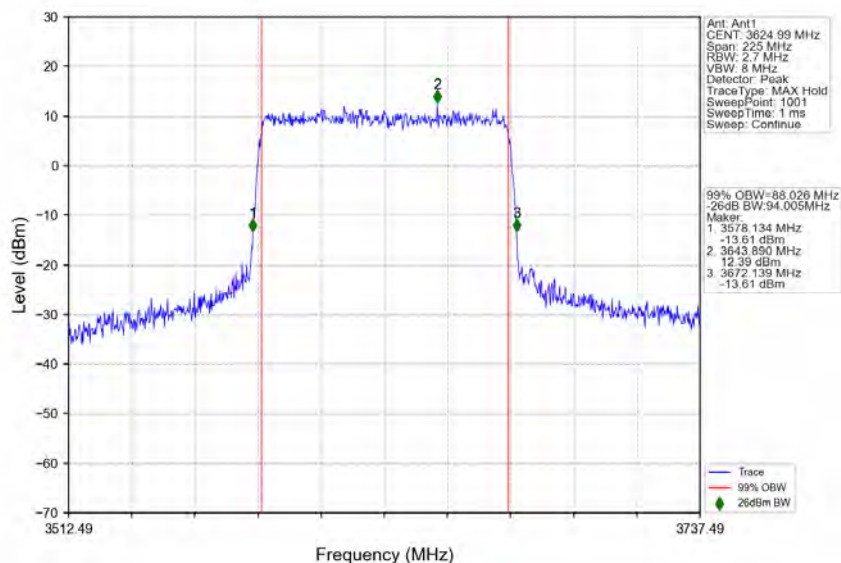
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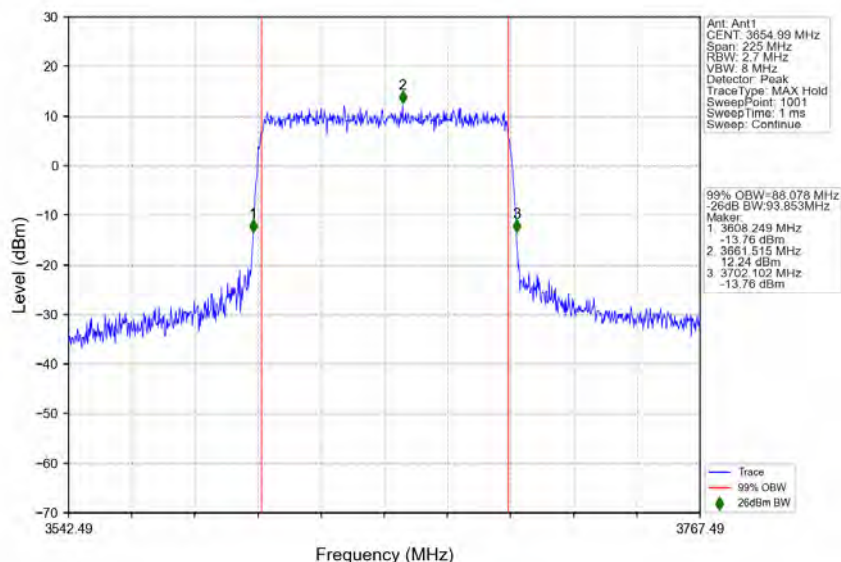
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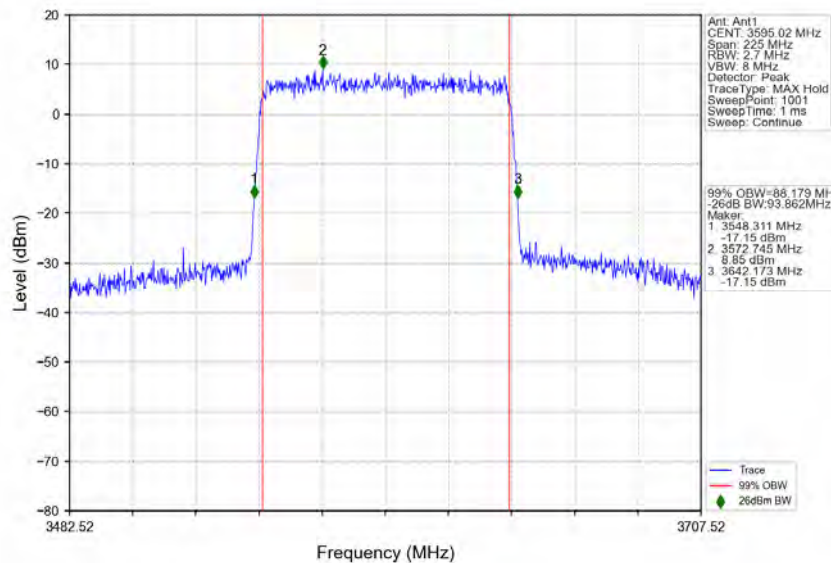
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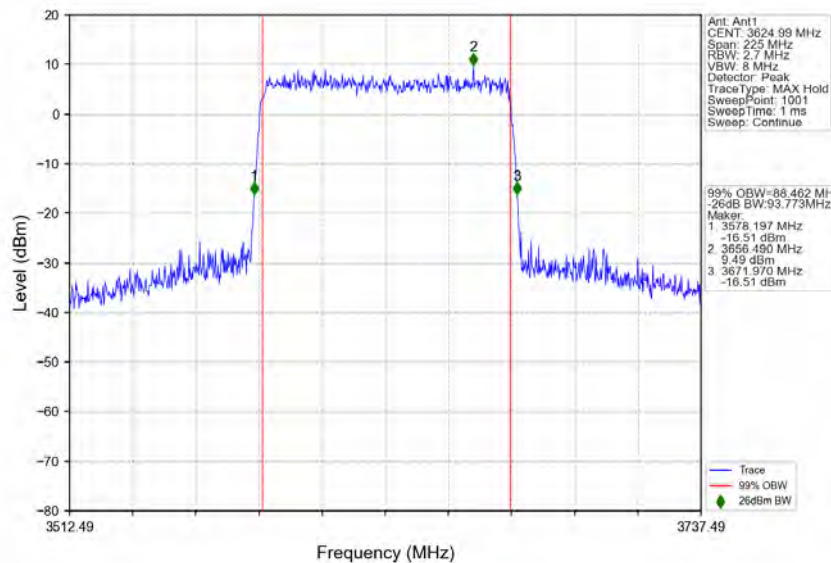
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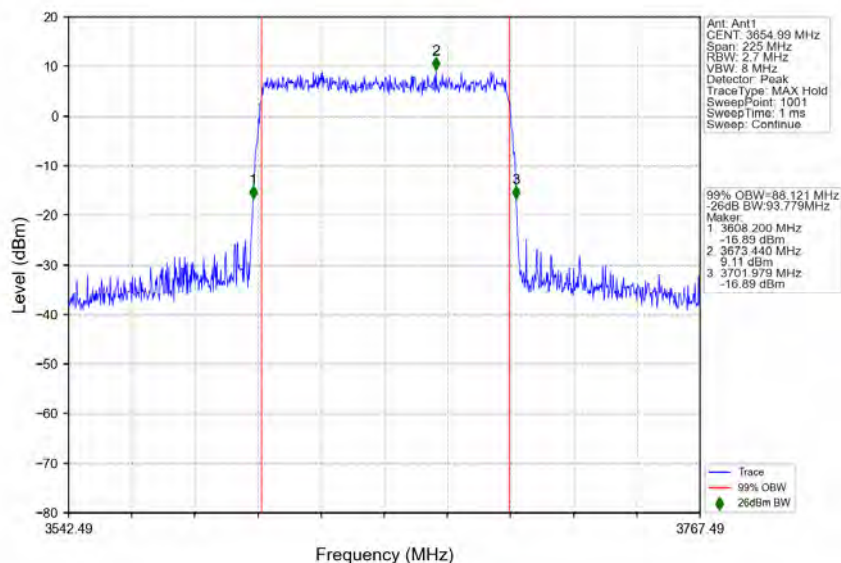
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4.11 30k_MIMO_100MHz_NTNV

4.11.1 Test Result

5G NR n78d SCS=30kHz MIMO 100MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
CP-OFDM QPSK	3600	Outer Full	98.35	104.55	/	Pass
	3624.99	Outer Full	98.21	105.00	/	Pass
	3649.98	Outer Full	98.18	104.58	/	Pass
CP-OFDM 16 QAM	3600	Outer Full	98.24	104.58	/	Pass
	3624.99	Outer Full	98.33	104.56	/	Pass
	3649.98	Outer Full	98.17	104.76	/	Pass
CP-OFDM 64 QAM	3600	Outer Full	98.33	104.47	/	Pass
	3624.99	Outer Full	98.30	104.51	/	Pass
	3649.98	Outer Full	98.19	104.63	/	Pass
CP-OFDM 256 QAM	3600	Outer Full	98.10	104.31	/	Pass
	3624.99	Outer Full	97.66	104.66	/	Pass
	3649.98	Outer Full	98.00	104.54	/	Pass



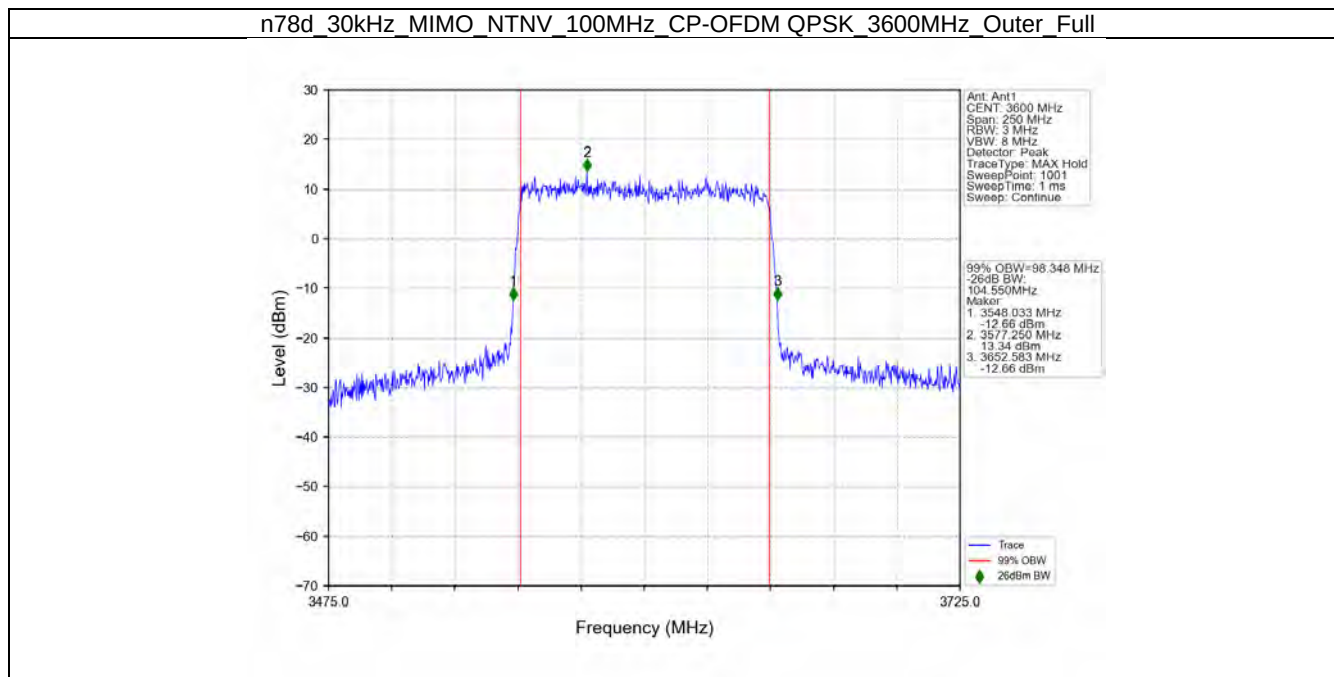
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4.11.2 Test Graph



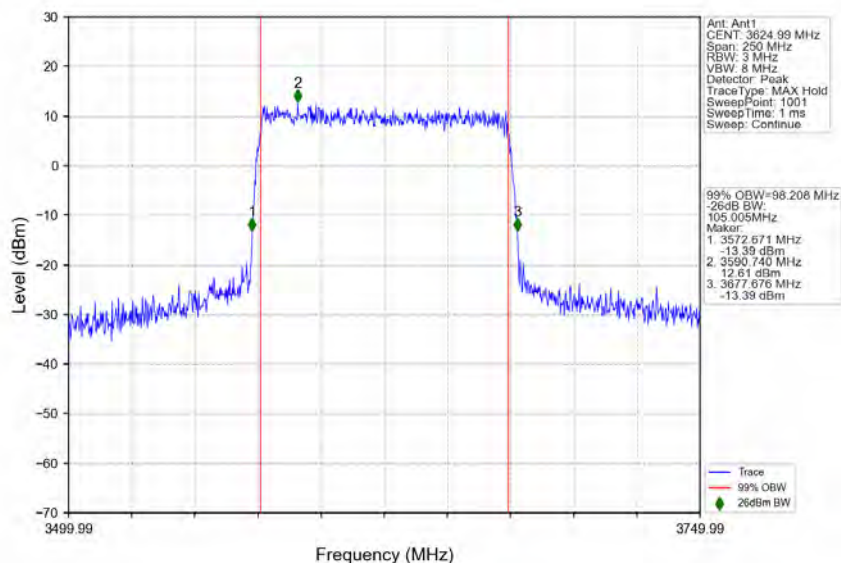
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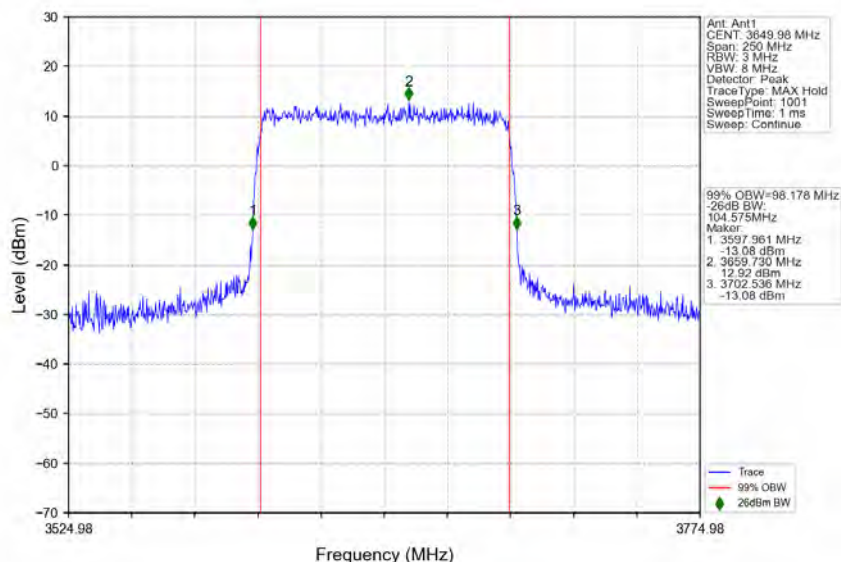
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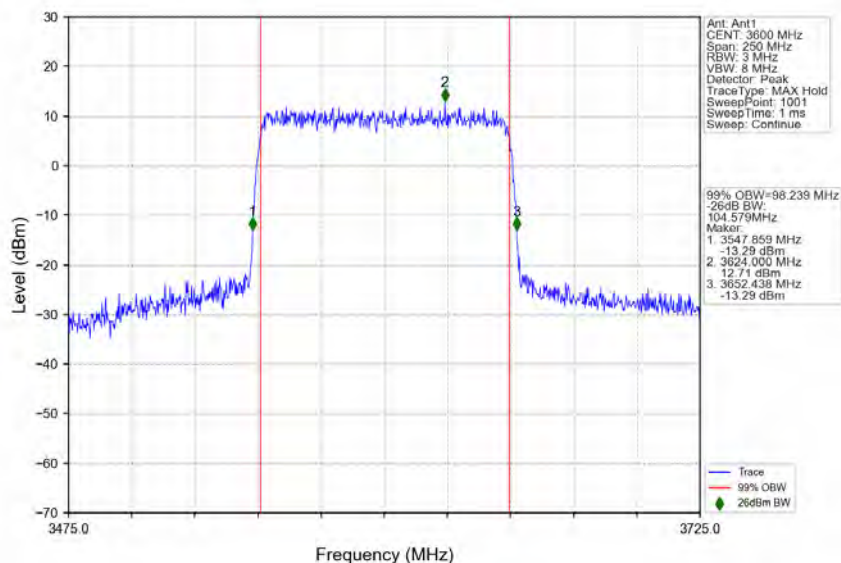
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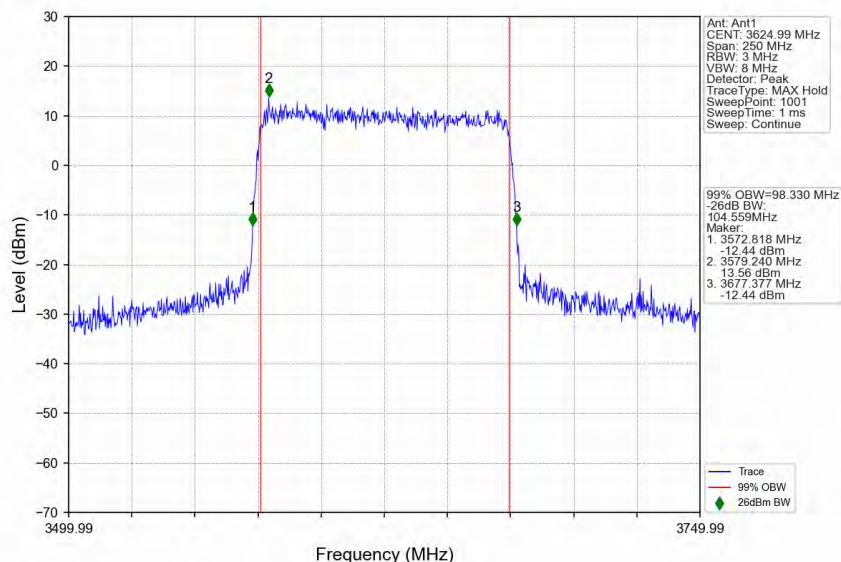
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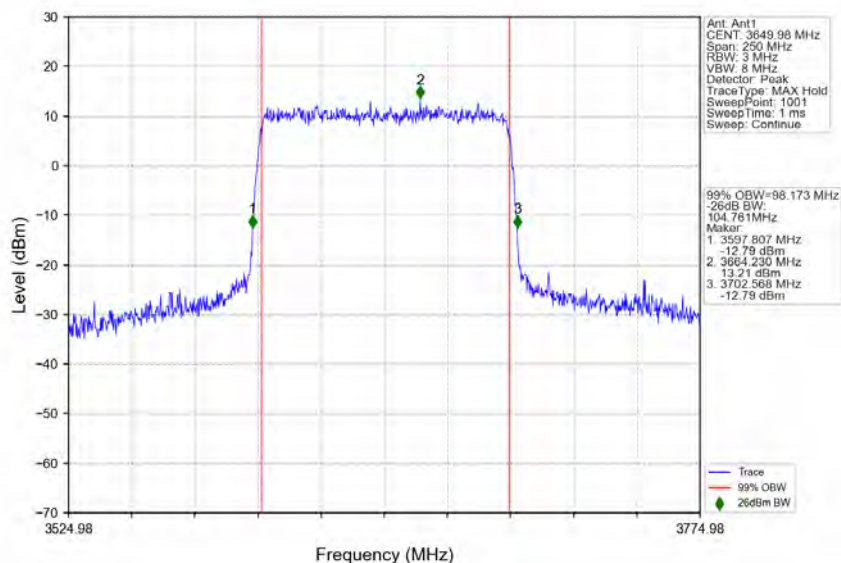
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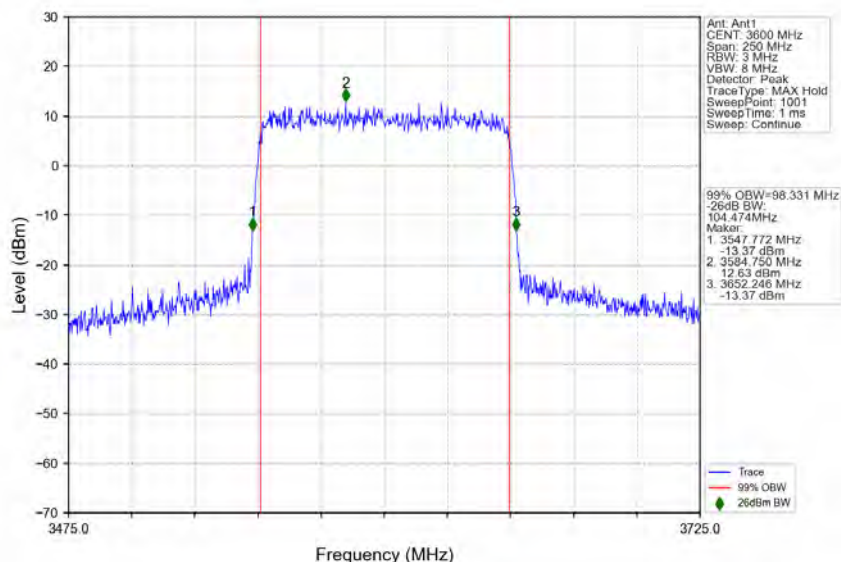
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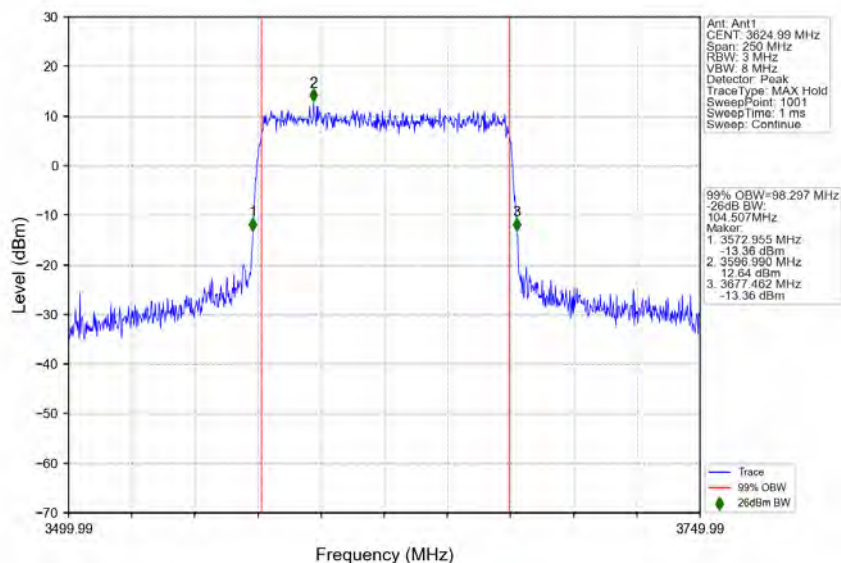
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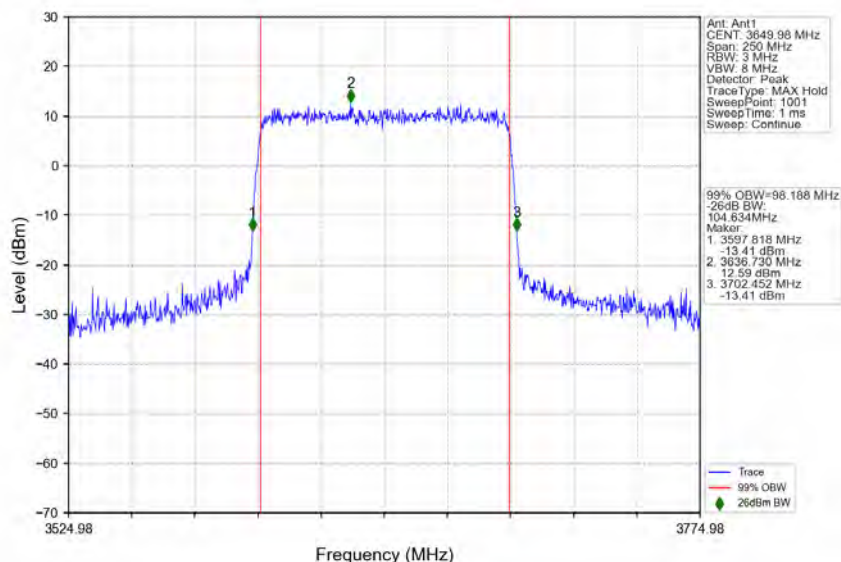
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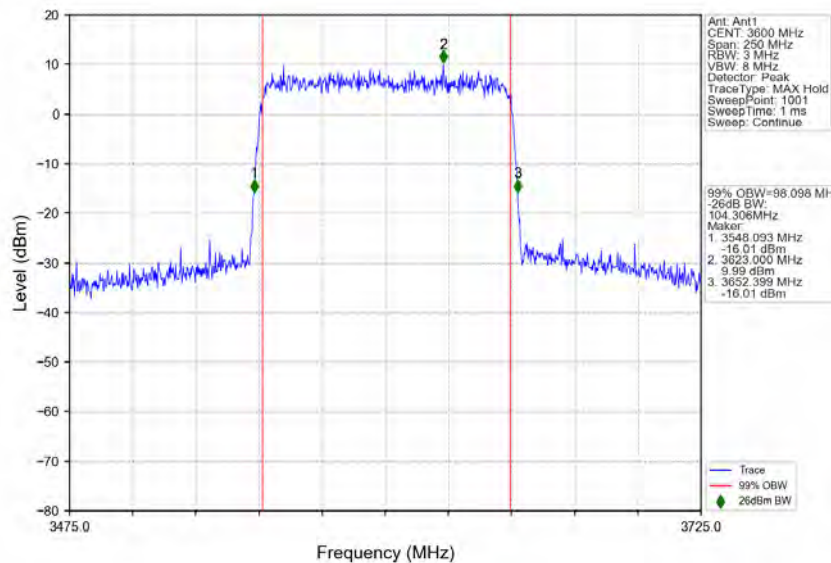
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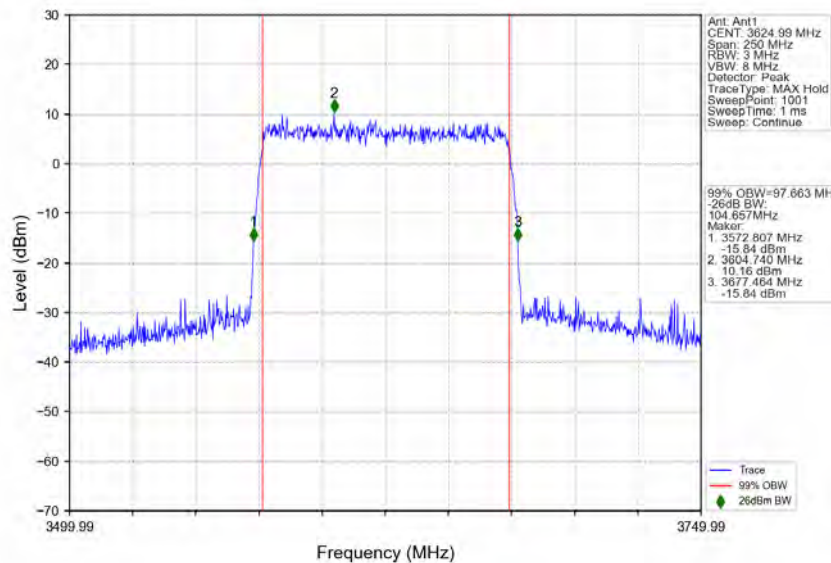
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n78d_30kHz_MIMO_NTNV_100MHz_CP-OFDM_256_QAM_3600MHz_Outer_Full



n78d_30kHz_MIMO_NTNV_100MHz_CP-OFDM_256_QAM_3624.99MHz_Outer_Full



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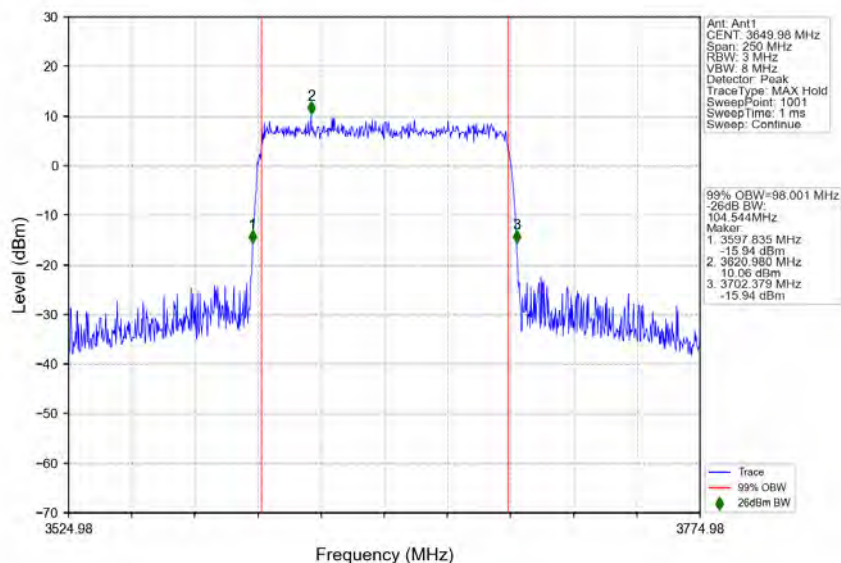
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n78d_30kHz_MIMO_NTNV_100MHz_CP-OFDM_256_QAM_3649.98MHz_Outer_Full



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5. Peak-Average Ratio

5.1 30k_MIMO_10MHz_NTNV

5.1.1 Test Result

5G NR n78d SCS=30kHz MIMO 10MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dBm)				Verdict
			Ant1	Ant2	Sum	Limit	
CP-OFDM QPSK	3555	Outer_Full	11.42	/	/	<=13	Pass
	3624.99	Outer_Full	11.50	/	/	<=13	Pass
	3694.98	Outer_Full	11.38	/	/	<=13	Pass
CP-OFDM 16 QAM	3555	Outer_Full	11.12	/	/	<=13	Pass
	3624.99	Outer_Full	11.26	/	/	<=13	Pass
	3694.98	Outer_Full	11.19	/	/	<=13	Pass
CP-OFDM 64 QAM	3555	Outer_Full	10.87	/	/	<=13	Pass
	3624.99	Outer_Full	11.18	/	/	<=13	Pass
	3694.98	Outer_Full	11.94	/	/	<=13	Pass
CP-OFDM 256 QAM	3555	Outer_Full	11.65	/	/	<=13	Pass
	3624.99	Outer_Full	11.74	/	/	<=13	Pass
	3694.98	Outer_Full	11.70	/	/	<=13	Pass



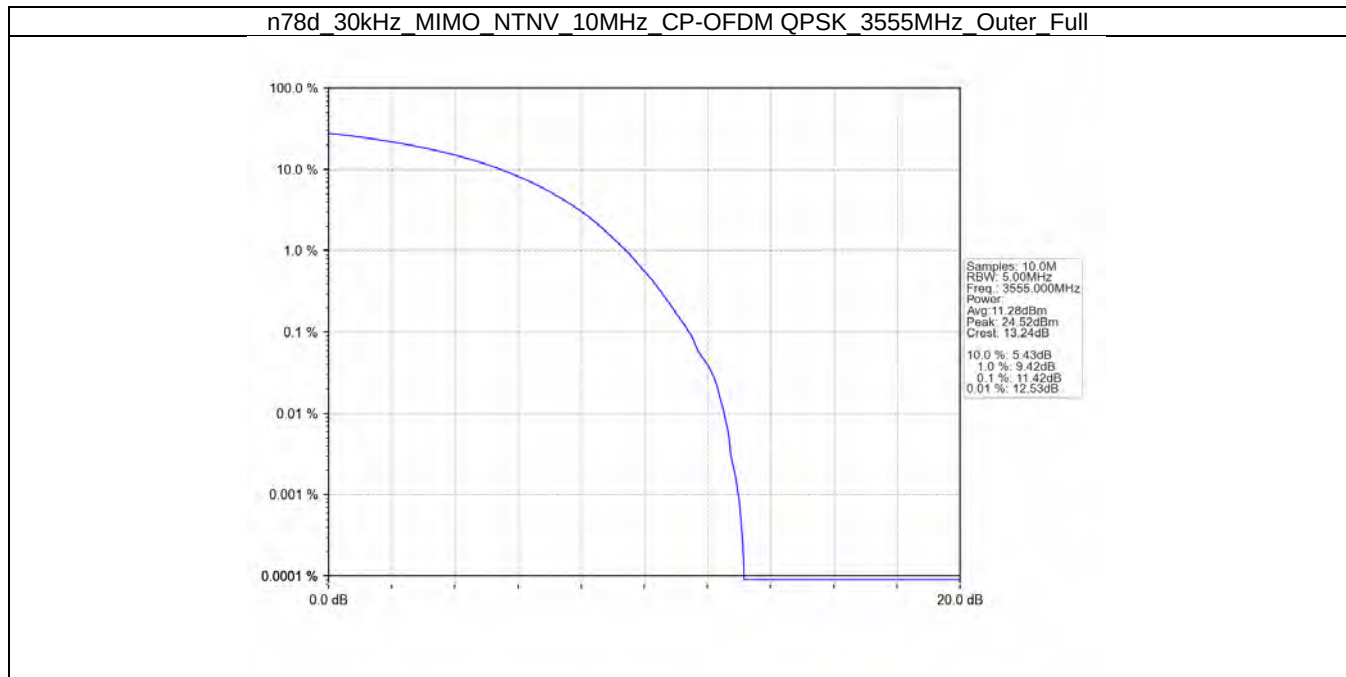
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5.1.2 Test Graph



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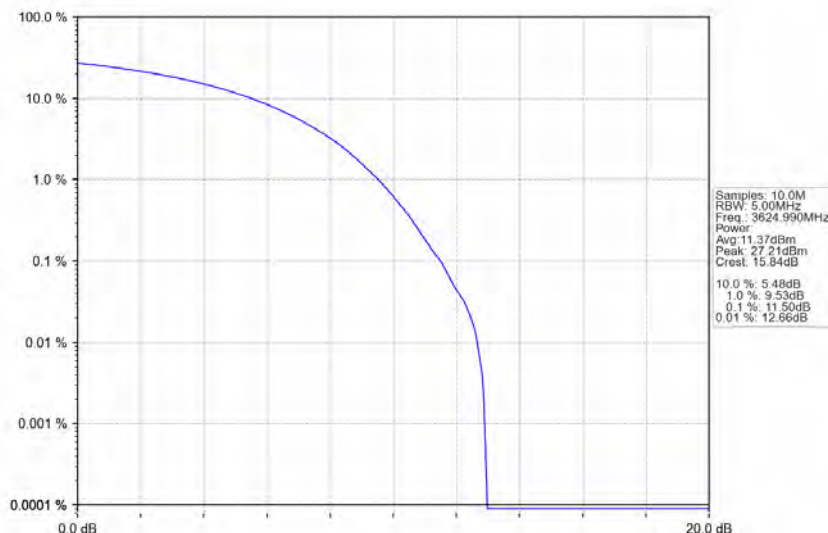
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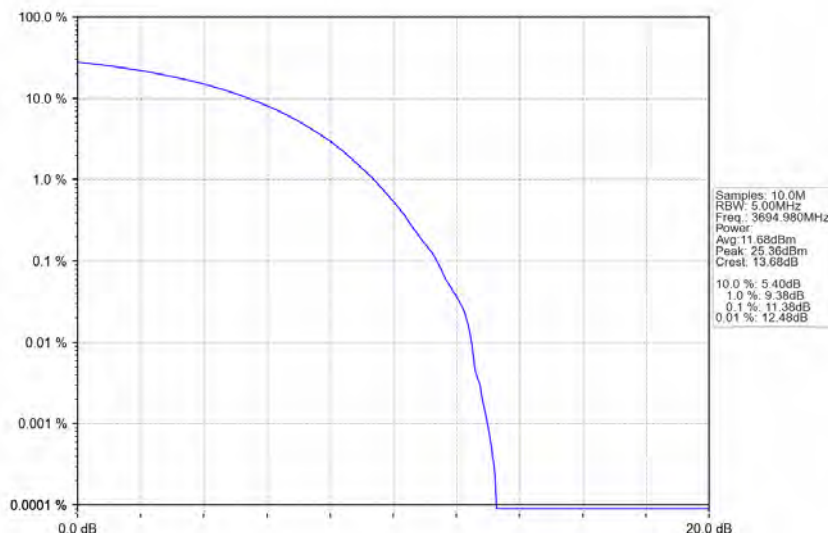
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n78d_30kHz_MIMO_NTNV_10MHz_CP-OFDM_QPSK_3694.98MHz_Outer_Full



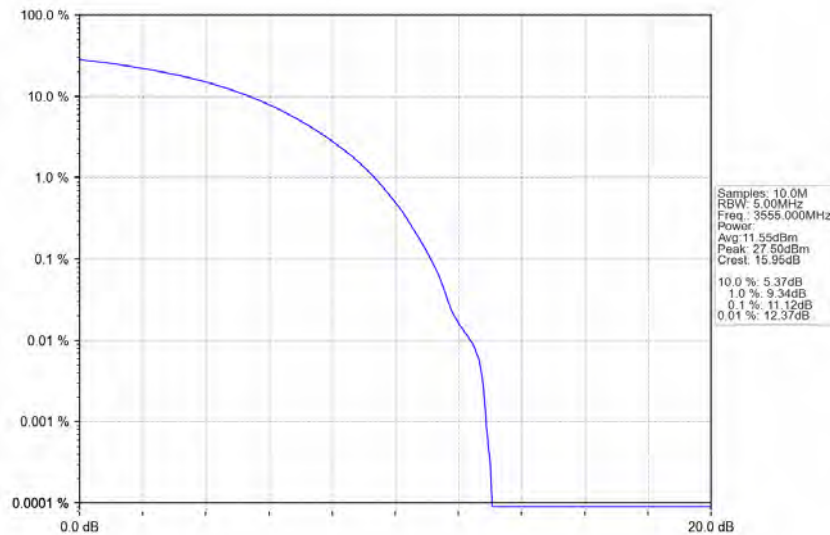
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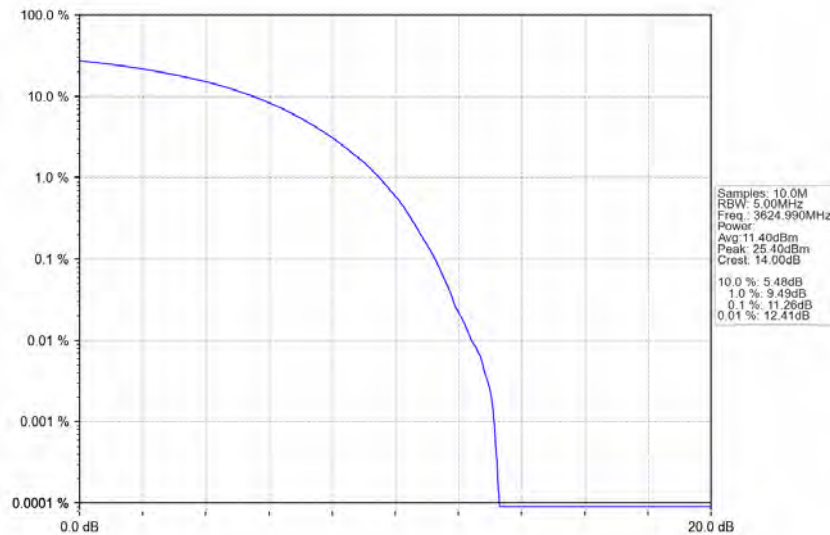
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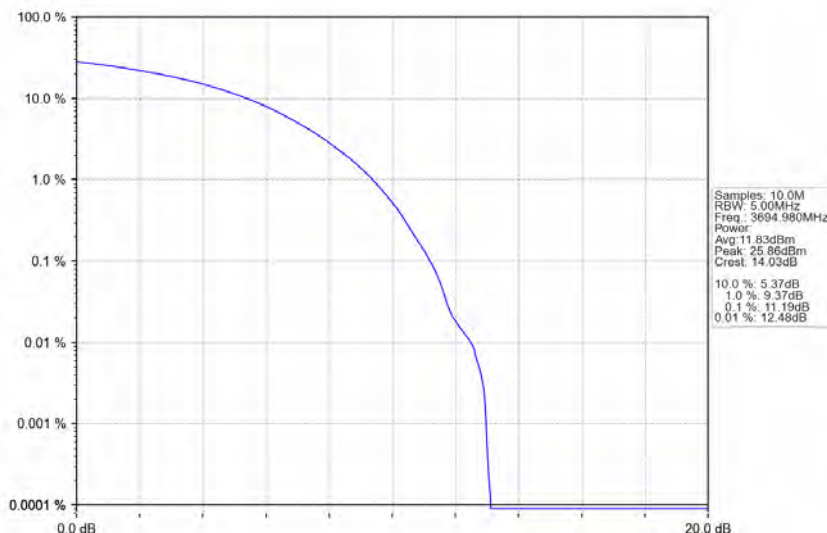
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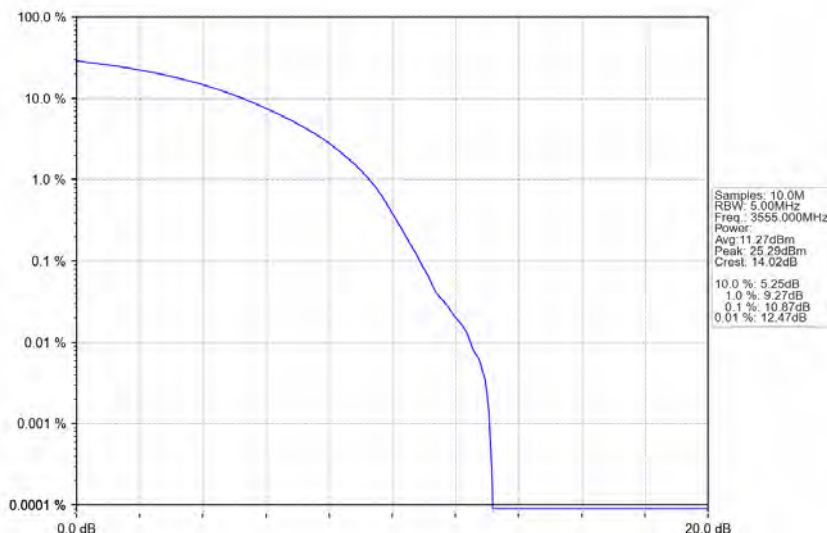
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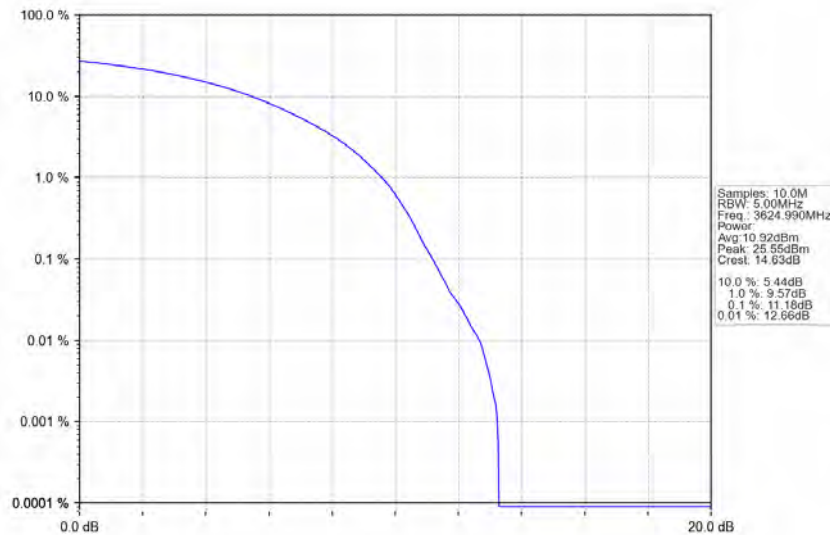
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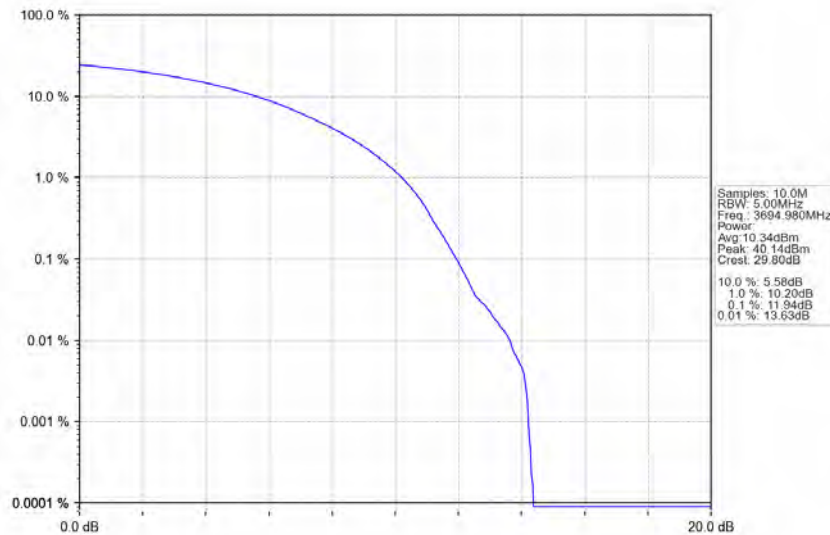
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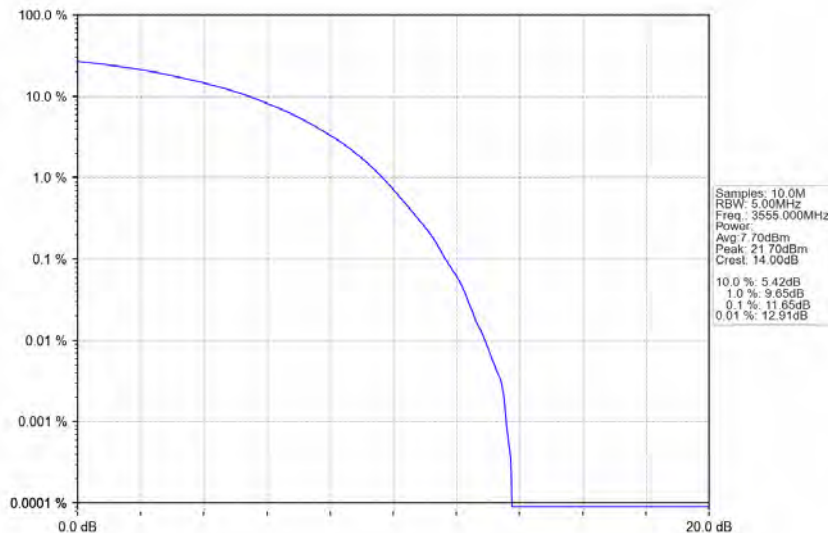


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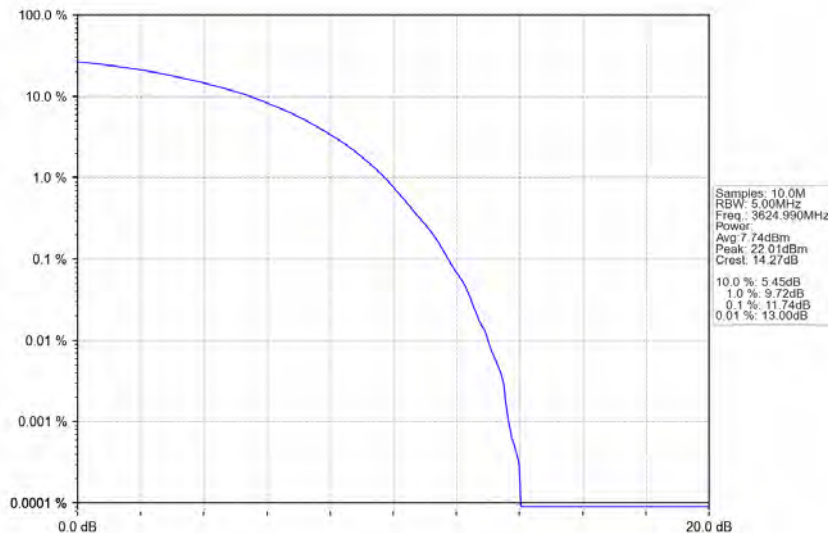
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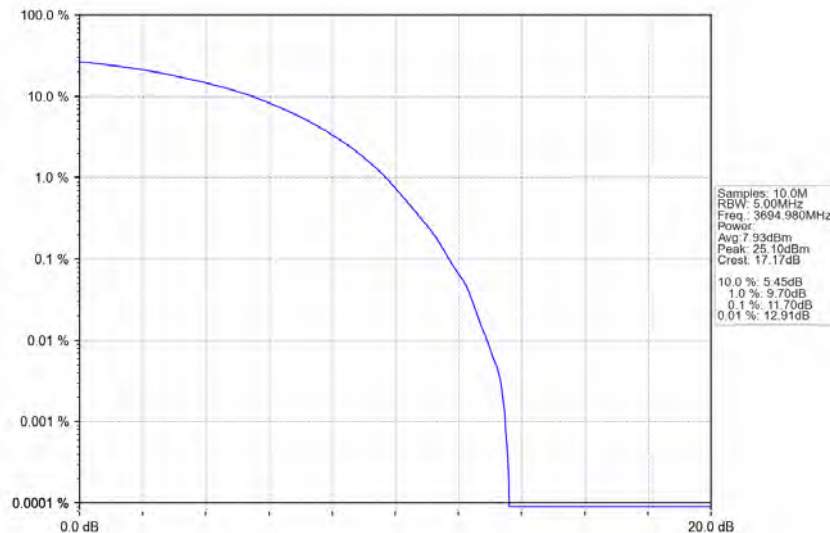
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5.2 30k_MIMO_15MHz_NTNV

5.2.1 Test Result

5G NR n78d SCS=30kHz MIMO 15MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dBm)				Verdict
			Ant1	Ant2	Sum	Limit	
CP-OFDM QPSK	3557.52	Outer_Full	11.17	/	/	<=13	Pass
	3624.99	Outer_Full	11.01	/	/	<=13	Pass
	3692.49	Outer_Full	12.78	/	/	<=13	Pass
CP-OFDM 16 QAM	3557.52	Outer_Full	12.33	/	/	<=13	Pass
	3624.99	Outer_Full	11.21	/	/	<=13	Pass
	3692.49	Outer_Full	12.37	/	/	<=13	Pass
CP-OFDM 64 QAM	3557.52	Outer_Full	11.19	/	/	<=13	Pass
	3624.99	Outer_Full	12.31	/	/	<=13	Pass
	3692.49	Outer_Full	12.41	/	/	<=13	Pass
CP-OFDM 256 QAM	3557.52	Outer_Full	12.01	/	/	<=13	Pass
	3624.99	Outer_Full	11.71	/	/	<=13	Pass
	3692.49	Outer_Full	11.95	/	/	<=13	Pass



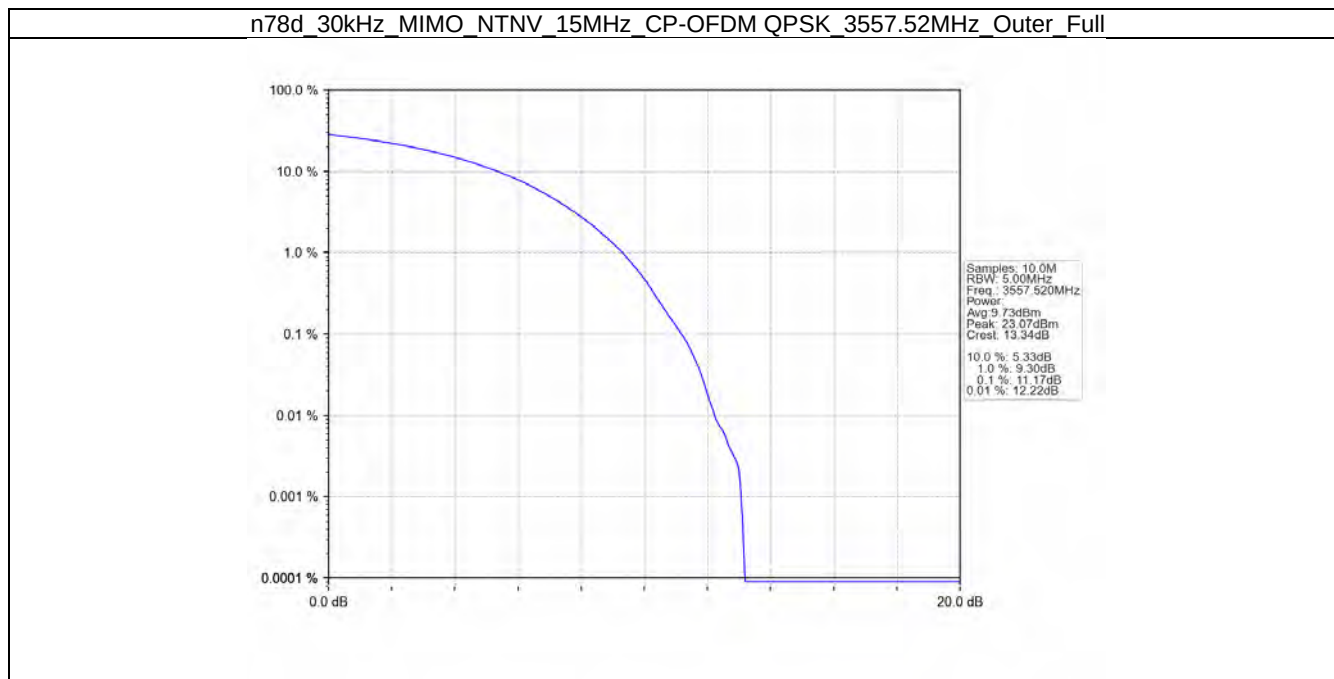
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5.2.2 Test Graph



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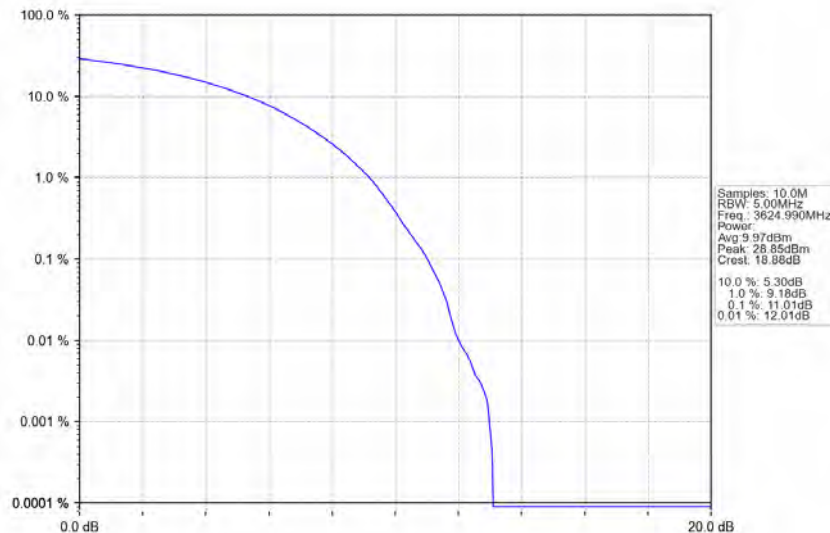
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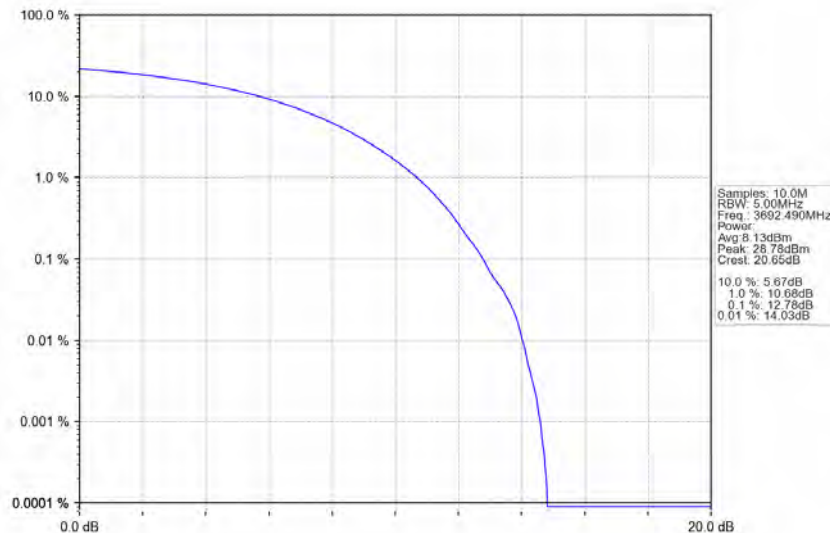
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n78d_30kHz_MIMO_NTNV_15MHz_CP-OFDM QPSK_3624.99MHz_Outer_Full



n78d_30kHz_MIMO_NTNV_15MHz_CP-OFDM QPSK_3692.49MHz_Outer_Full



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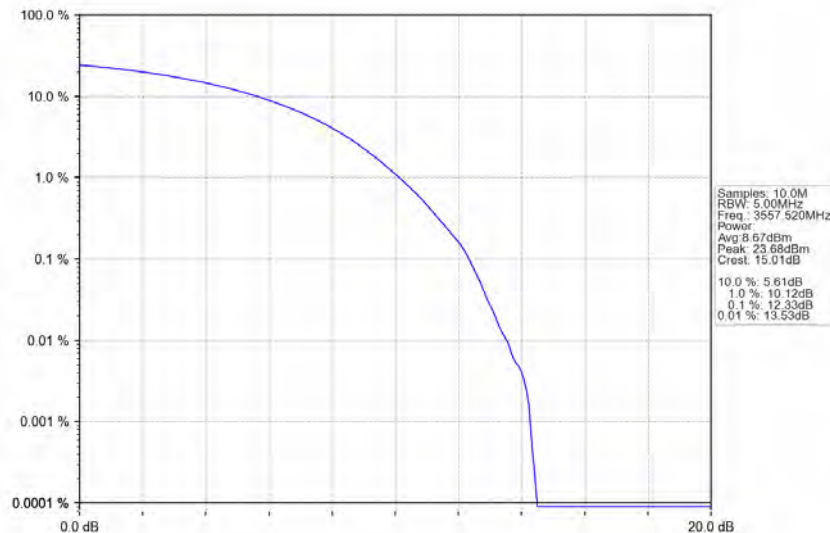
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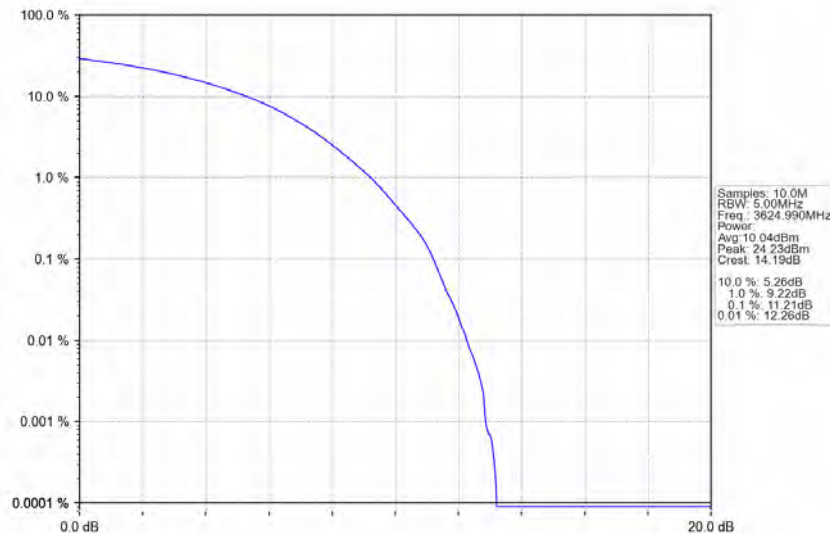
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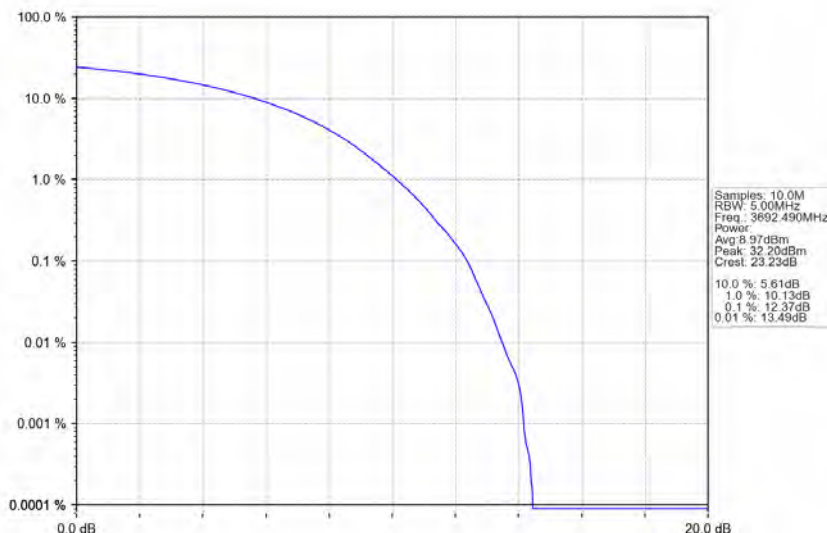
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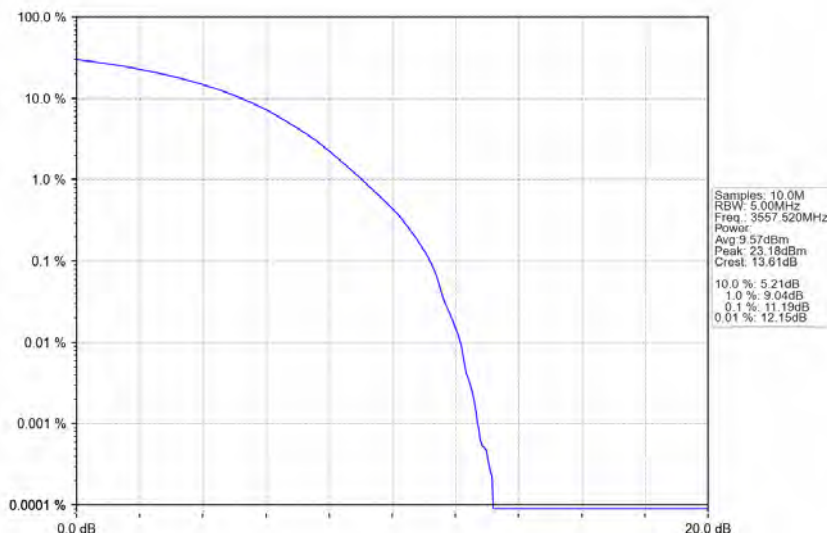
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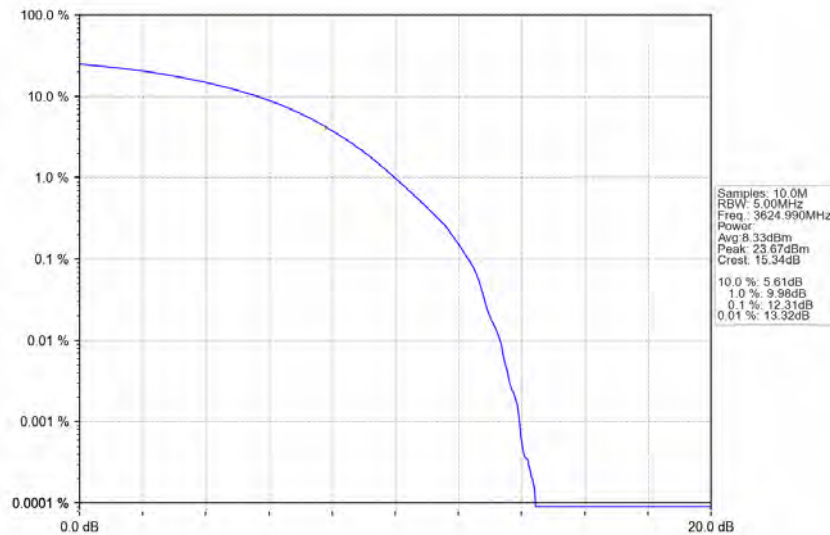
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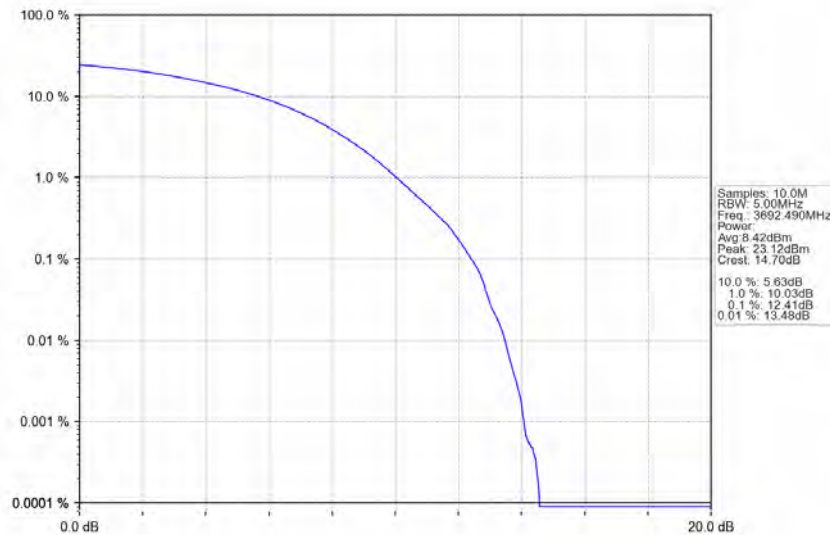
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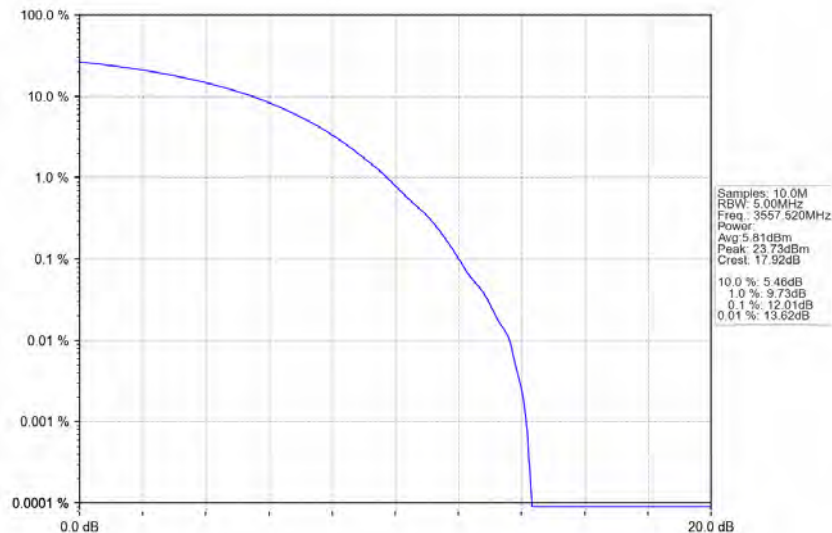
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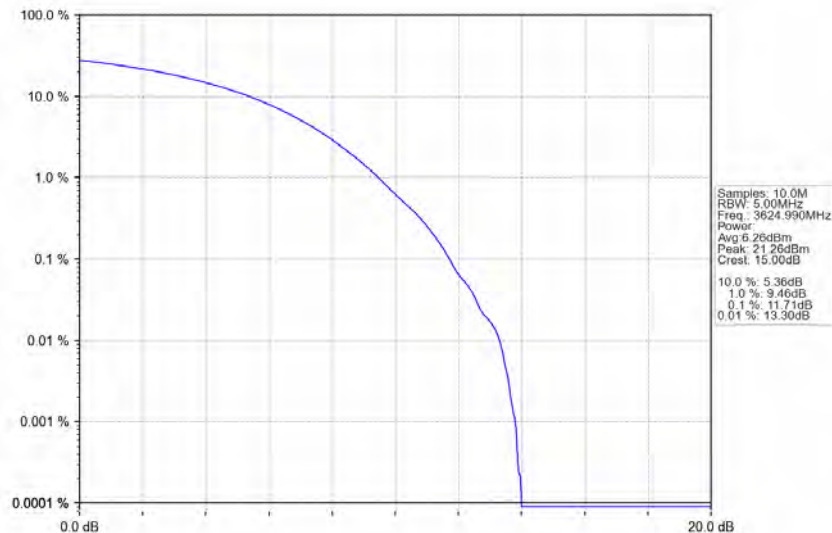
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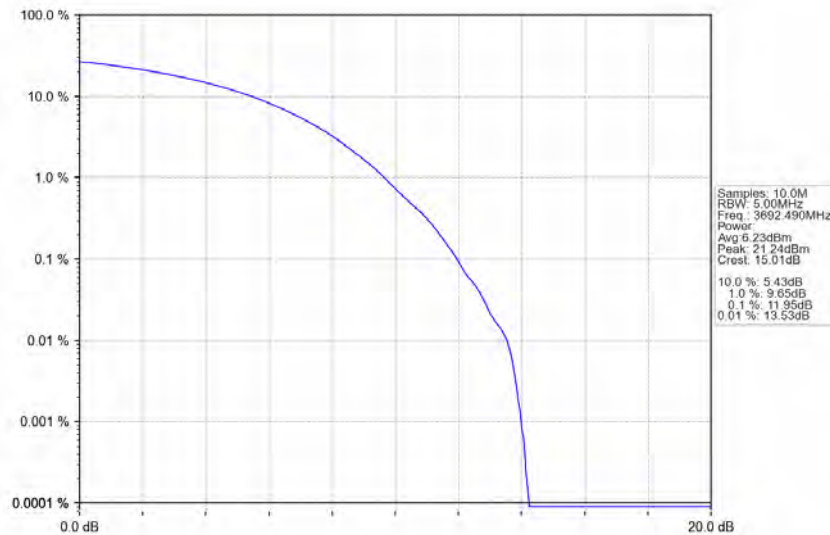
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5.3 30k_MIMO_20MHz_NTNV

5.3.1 Test Result

5G NR n78d SCS=30kHz MIMO 20MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dBm)				Verdict
			Ant1	Ant2	Sum	Limit	
CP-OFDM QPSK	3560.01	Outer_Full	12.25	/	/	<=13	Pass
	3624.99	Outer_Full	12.04	/	/	<=13	Pass
	3690	Outer_Full	11.03	/	/	<=13	Pass
CP-OFDM 16 QAM	3560.01	Outer_Full	10.94	/	/	<=13	Pass
	3624.99	Outer_Full	10.99	/	/	<=13	Pass
	3690	Outer_Full	11.92	/	/	<=13	Pass
CP-OFDM 64 QAM	3560.01	Outer_Full	11.28	/	/	<=13	Pass
	3624.99	Outer_Full	11.61	/	/	<=13	Pass
	3690	Outer_Full	10.77	/	/	<=13	Pass
CP-OFDM 256 QAM	3560.01	Outer_Full	11.93	/	/	<=13	Pass
	3624.99	Outer_Full	12.08	/	/	<=13	Pass
	3690	Outer_Full	12.13	/	/	<=13	Pass



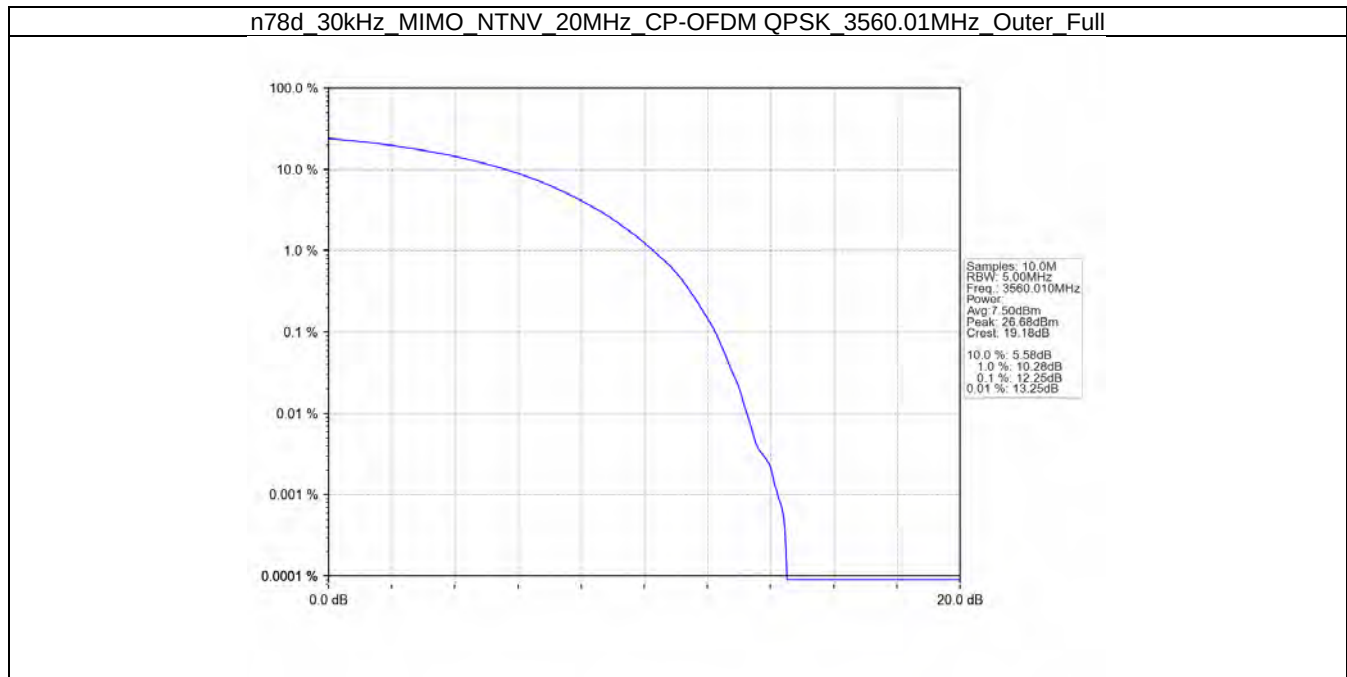
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5.3.2 Test Graph



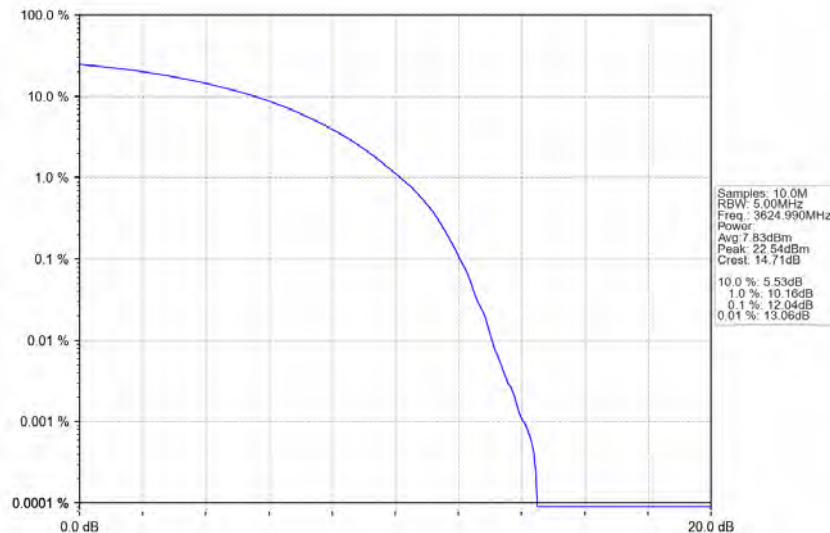
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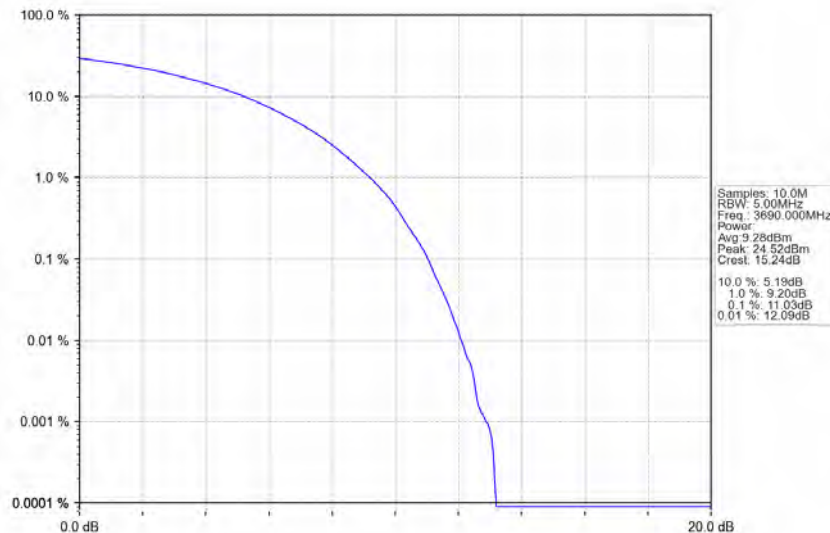
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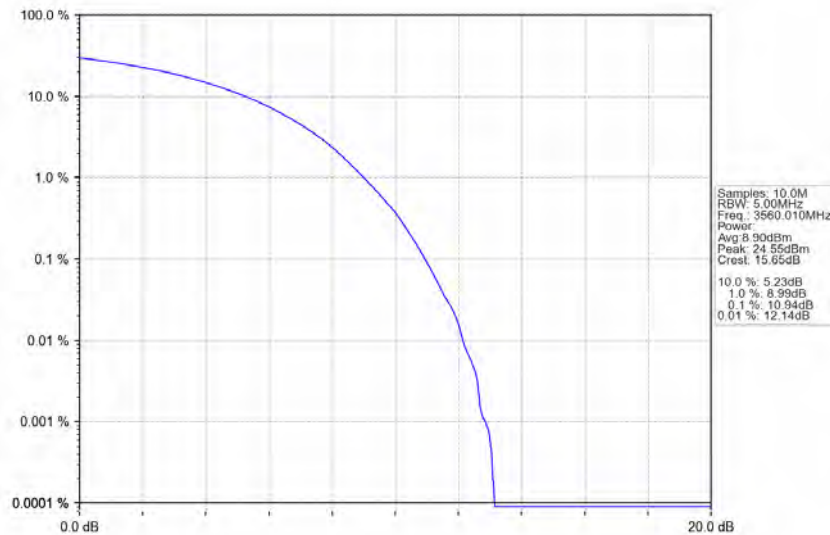
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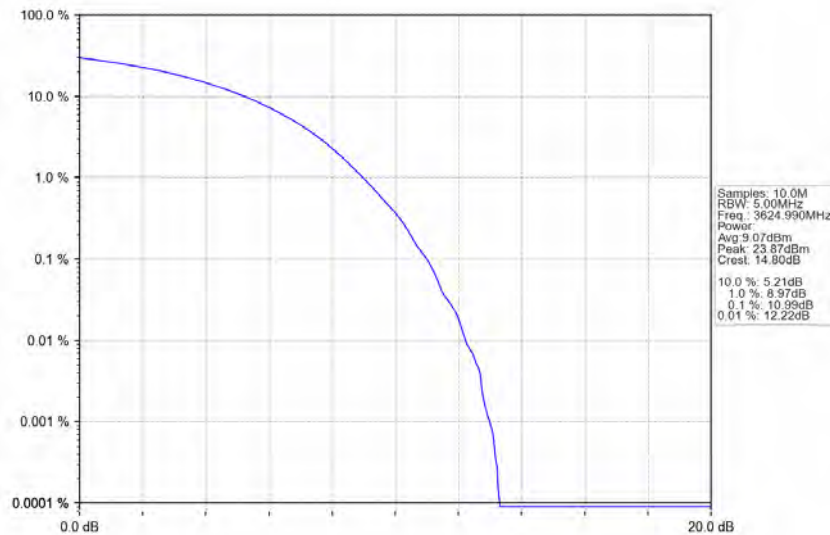
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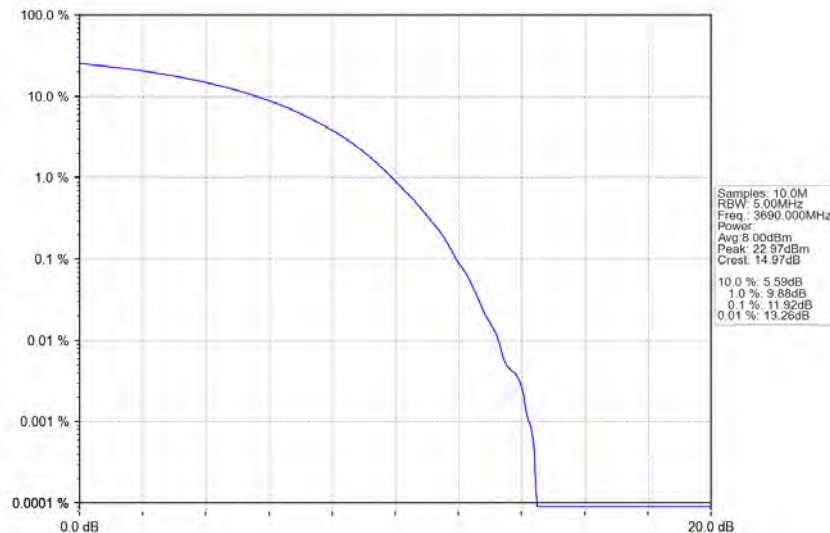
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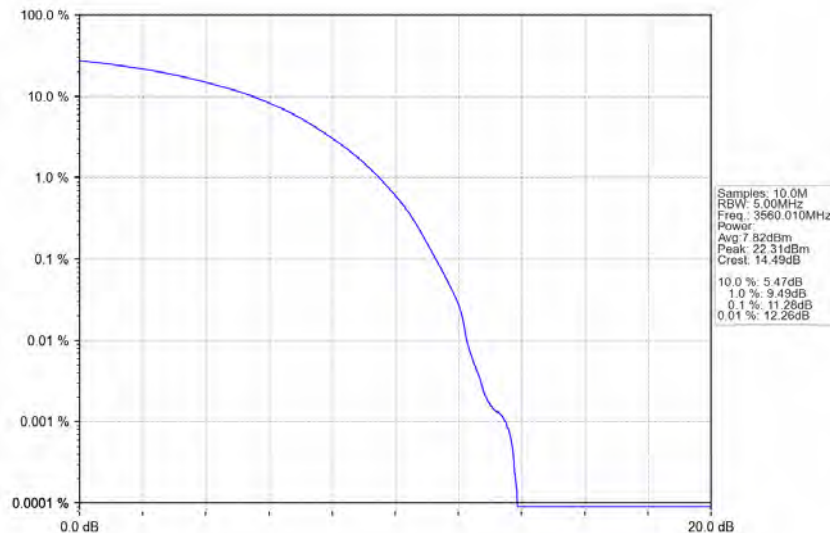
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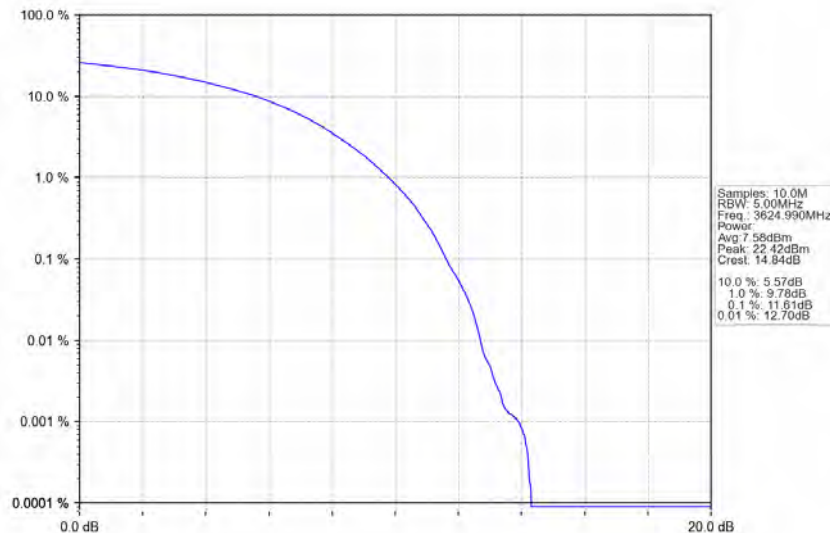
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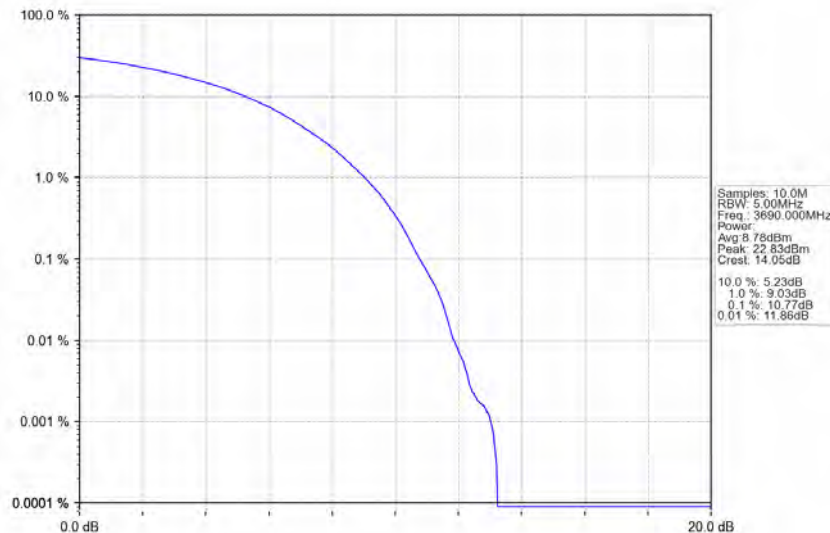
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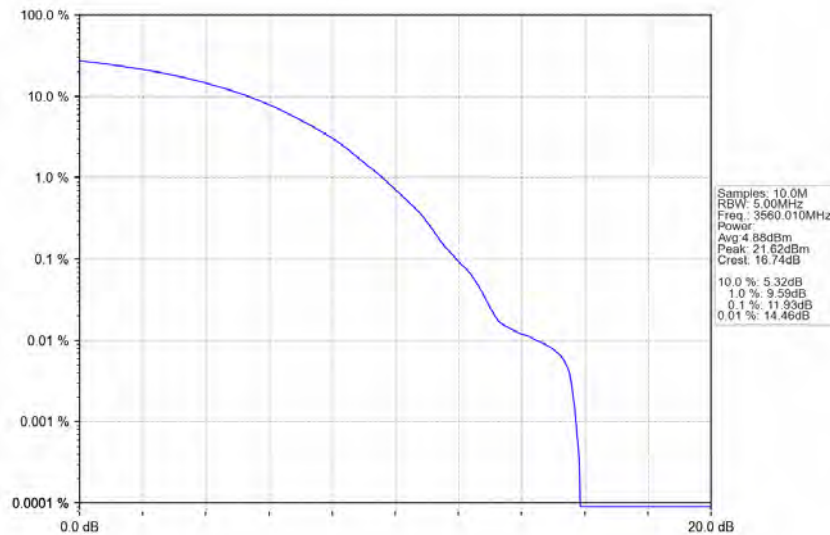
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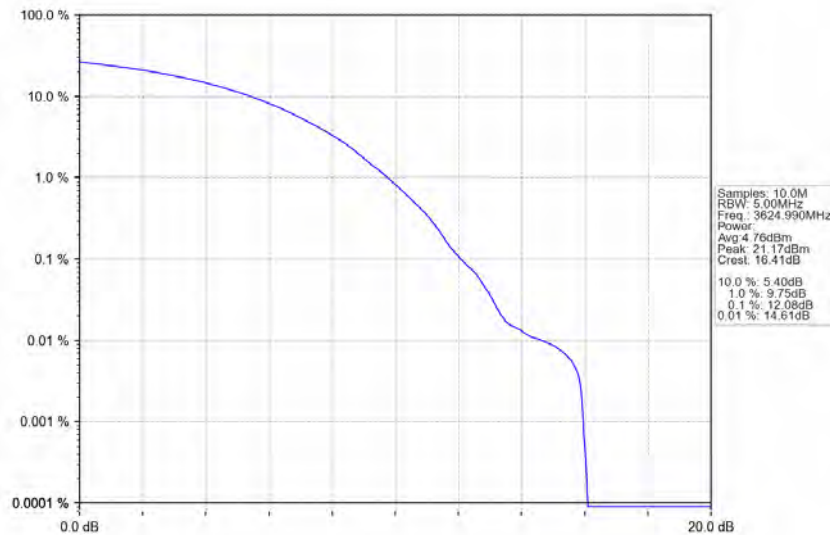
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n78d_30kHz_MIMO_NTNV_20MHz_CP-OFDM_256_QAM_3560.01MHz_Outer_Full



n78d_30kHz_MIMO_NTNV_20MHz_CP-OFDM_256_QAM_3624.99MHz_Outer_Full



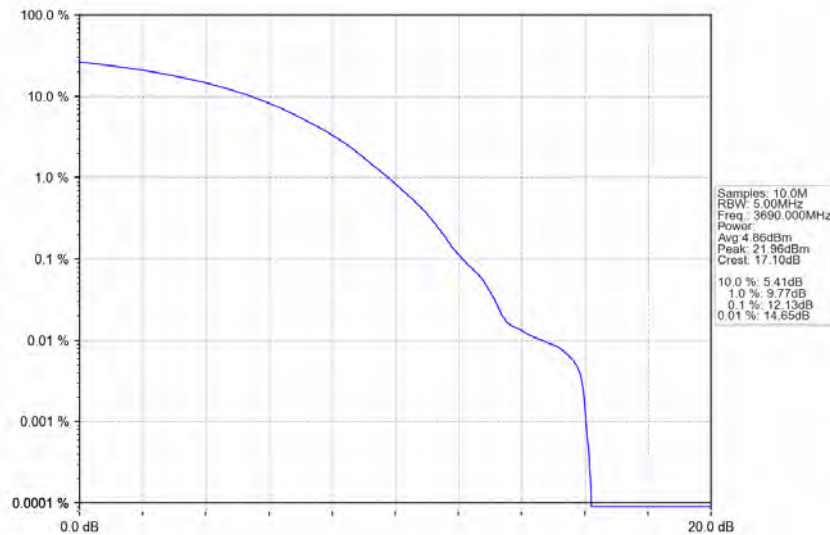
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n78d_30kHz_MIMO_NTNV_20MHz_CP-OFDM_256_QAM_3690MHz_Outer_Full



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5.4 30k_MIMO_30MHz_NTNV

5.4.1 Test Result

5G NR n78d SCS=30kHz MIMO 30MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dBm)				Verdict
			Ant1	Ant2	Sum	Limit	
CP-OFDM QPSK	3565.02	Outer_Full	11.75	/	/	<=13	Pass
	3624.99	Outer_Full	11.76	/	/	<=13	Pass
	3684.99	Outer_Full	11.65	/	/	<=13	Pass
CP-OFDM 16 QAM	3565.02	Outer_Full	11.28	/	/	<=13	Pass
	3624.99	Outer_Full	11.48	/	/	<=13	Pass
	3684.99	Outer_Full	11.43	/	/	<=13	Pass
CP-OFDM 64 QAM	3565.02	Outer_Full	11.35	/	/	<=13	Pass
	3624.99	Outer_Full	11.48	/	/	<=13	Pass
	3684.99	Outer_Full	11.36	/	/	<=13	Pass
CP-OFDM 256 QAM	3565.02	Outer_Full	11.69	/	/	<=13	Pass
	3624.99	Outer_Full	11.85	/	/	<=13	Pass
	3684.99	Outer_Full	11.73	/	/	<=13	Pass



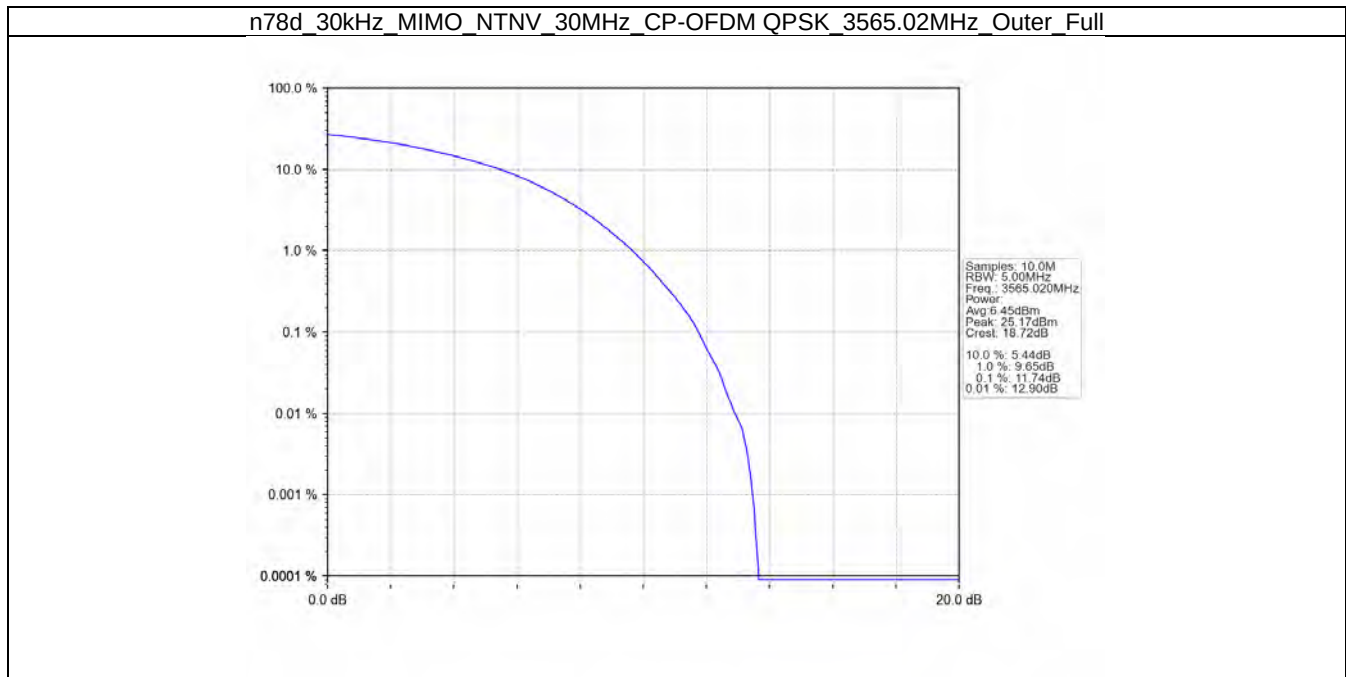
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5.4.2 Test Graph



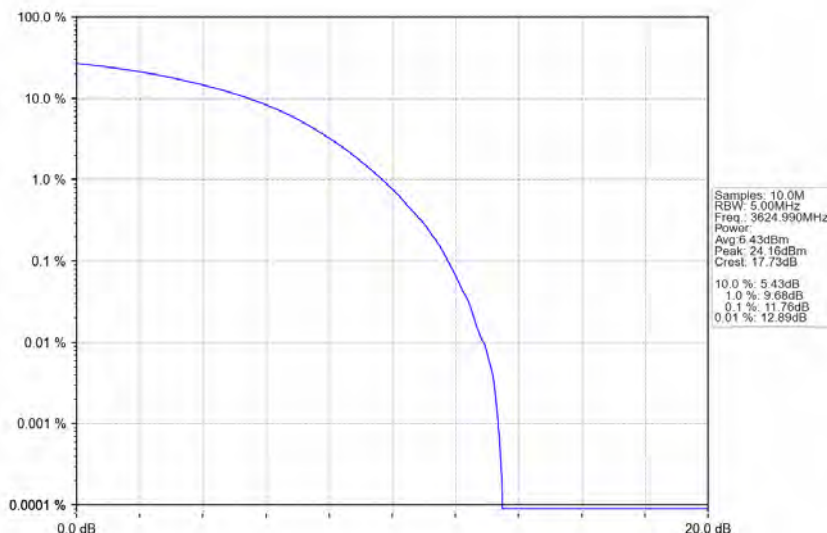
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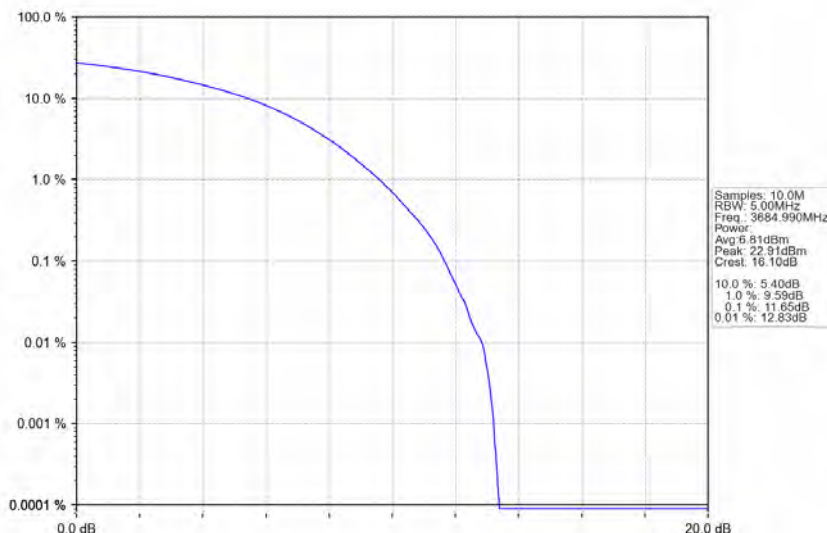
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n78d_30kHz_MIMO_NTNV_30MHz_CP-OFDM QPSK_3624.99MHz_Outer_Full



n78d_30kHz_MIMO_NTNV_30MHz_CP-OFDM QPSK_3684.99MHz_Outer_Full



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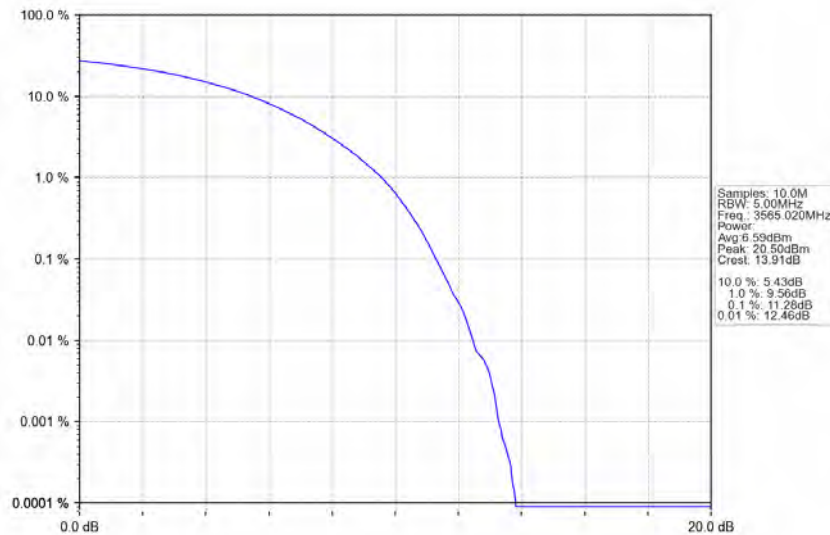
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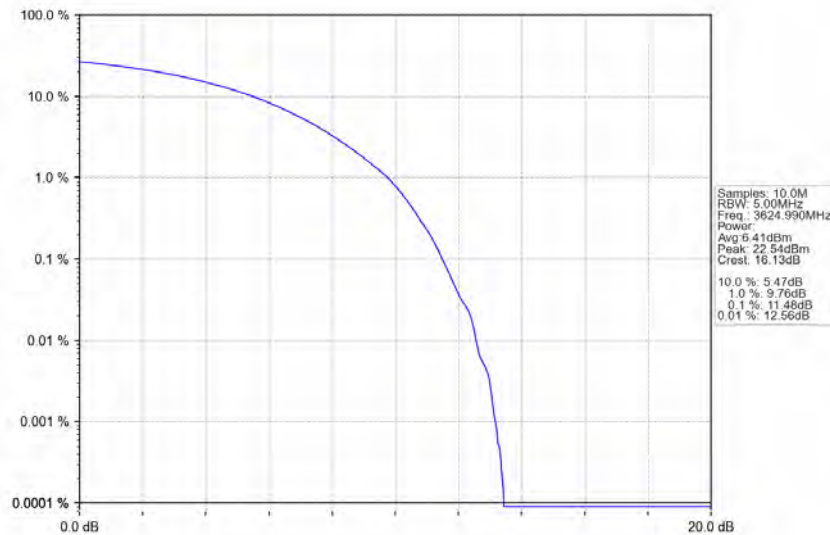
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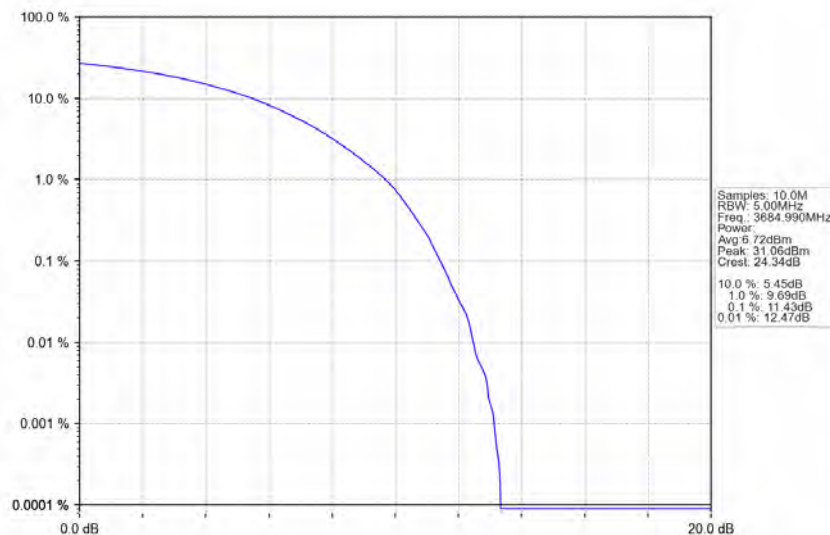
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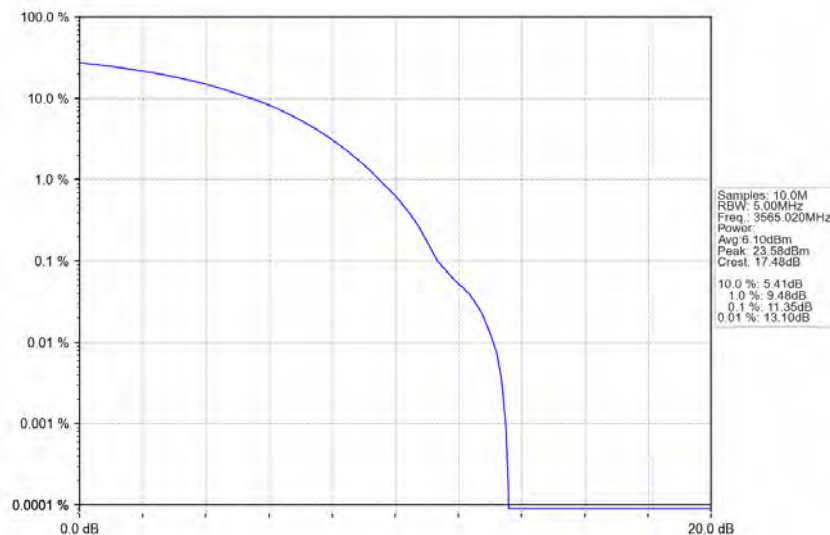
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n78d_30kHz_MIMO_NTNV_30MHz_CP-OFDM 64 QAM_3565.02MHz_Outer_Full



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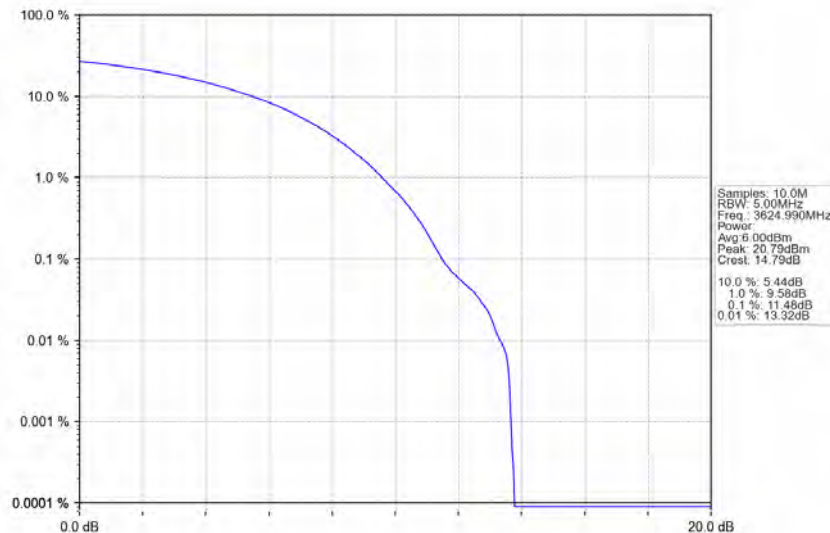
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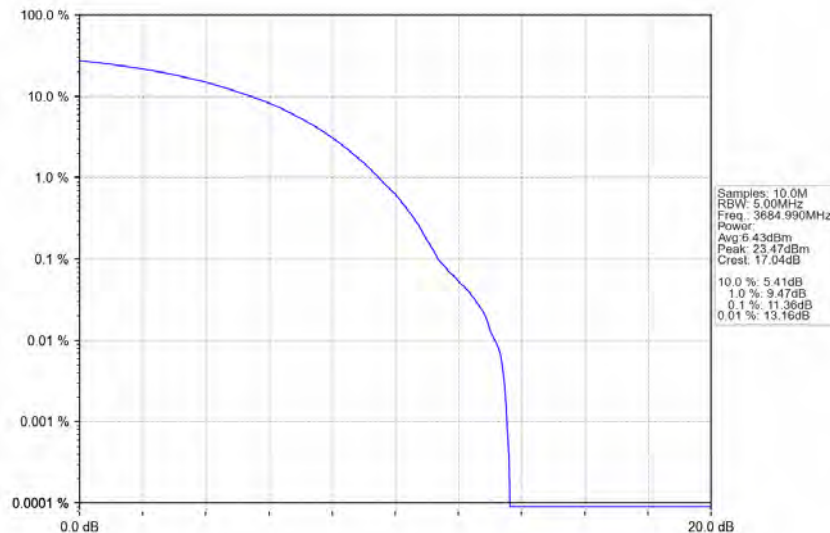
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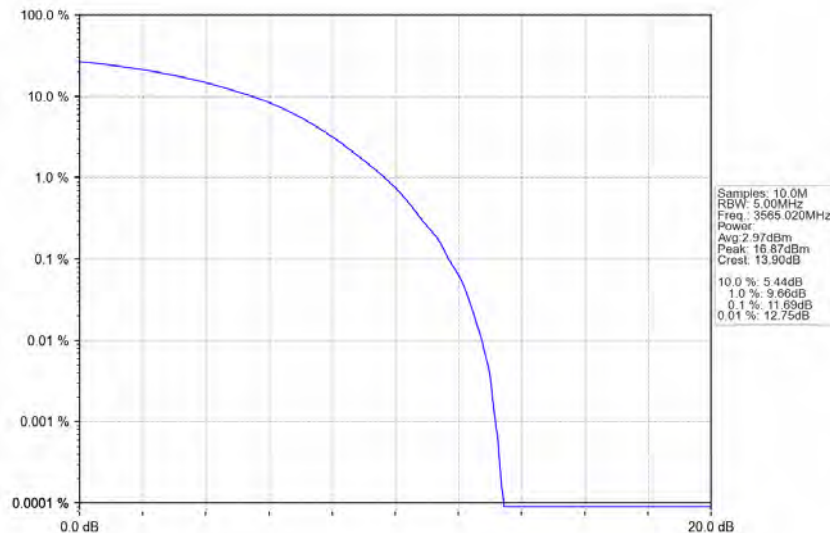
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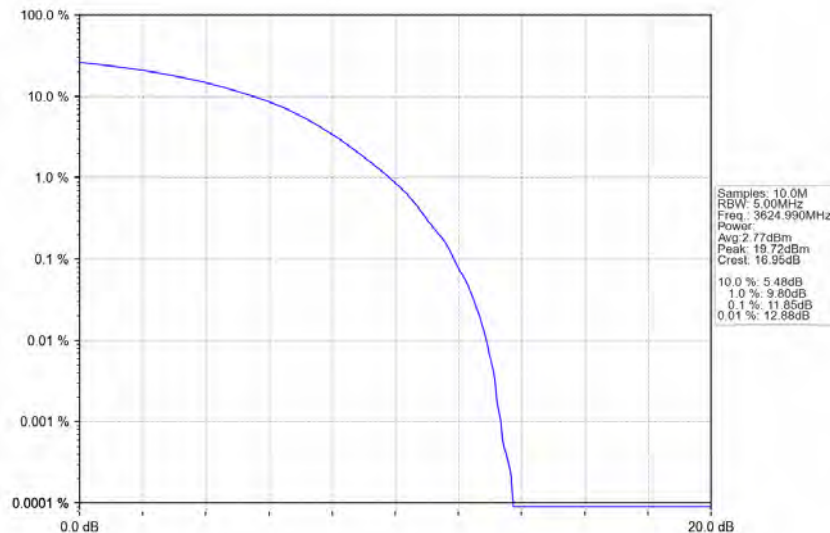
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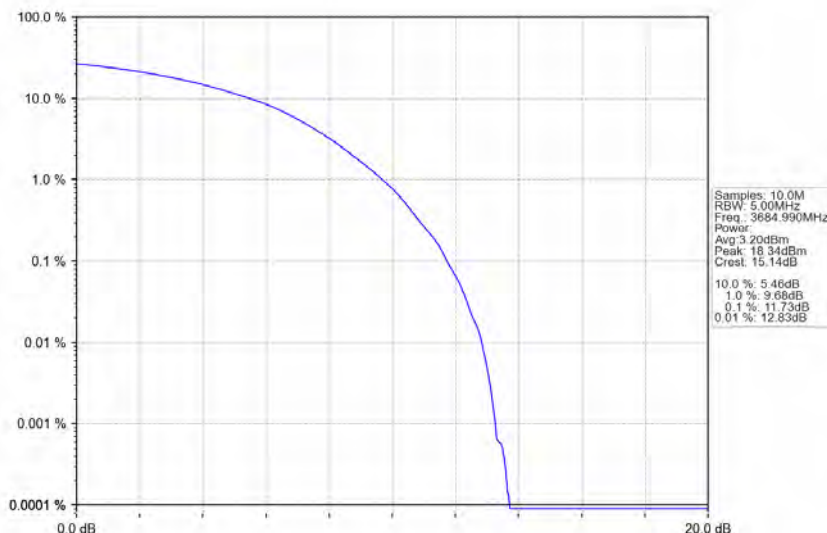
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5.5 30k_MIMO_40MHz_NTNV

5.5.1 Test Result

5G NR n78d SCS=30kHz MIMO 40MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dBm)				Verdict
			Ant1	Ant2	Sum	Limit	
CP-OFDM QPSK	3570	Outer_Full	11.36	/	/	<=13	Pass
	3624.99	Outer_Full	11.56	/	/	<=13	Pass
	3679.98	Outer_Full	11.47	/	/	<=13	Pass
CP-OFDM 16 QAM	3570	Outer_Full	11.53	/	/	<=13	Pass
	3624.99	Outer_Full	11.49	/	/	<=13	Pass
	3679.98	Outer_Full	11.51	/	/	<=13	Pass
CP-OFDM 64 QAM	3570	Outer_Full	11.60	/	/	<=13	Pass
	3624.99	Outer_Full	11.59	/	/	<=13	Pass
	3679.98	Outer_Full	11.54	/	/	<=13	Pass
CP-OFDM 256 QAM	3570	Outer_Full	11.91	/	/	<=13	Pass
	3624.99	Outer_Full	11.69	/	/	<=13	Pass
	3679.98	Outer_Full	11.84	/	/	<=13	Pass



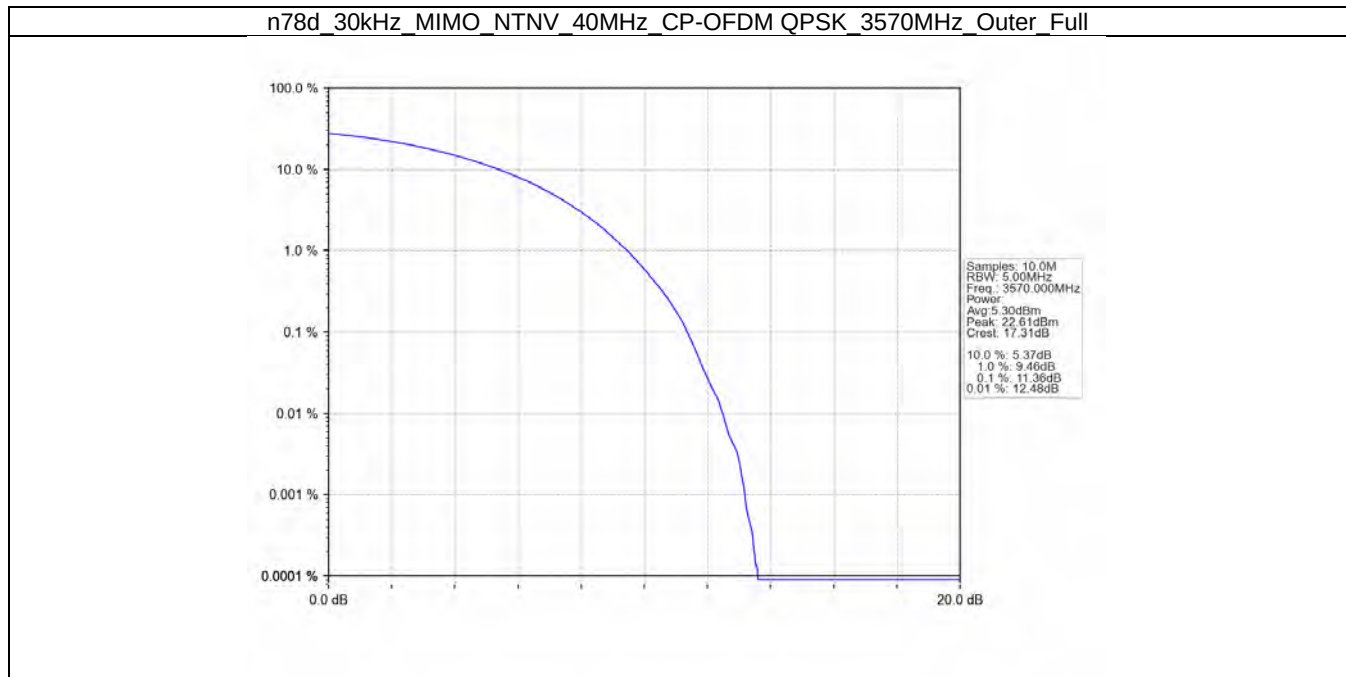
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5.5.2 Test Graph



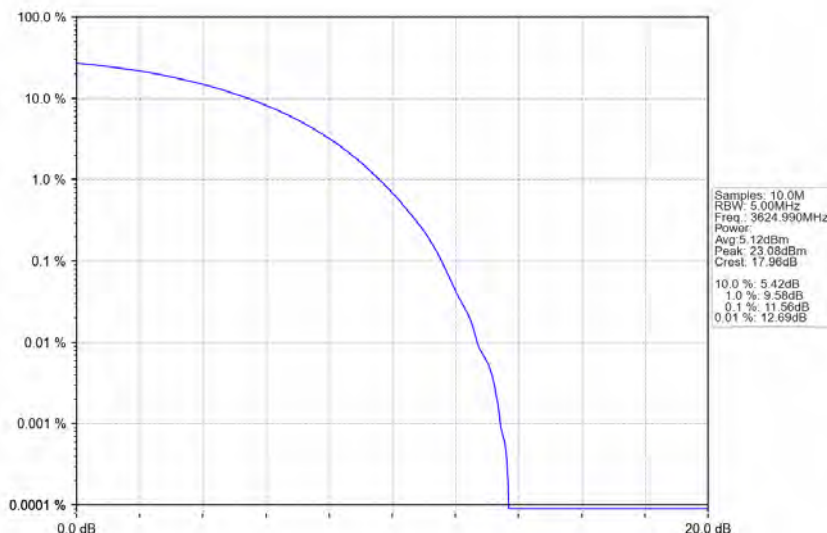
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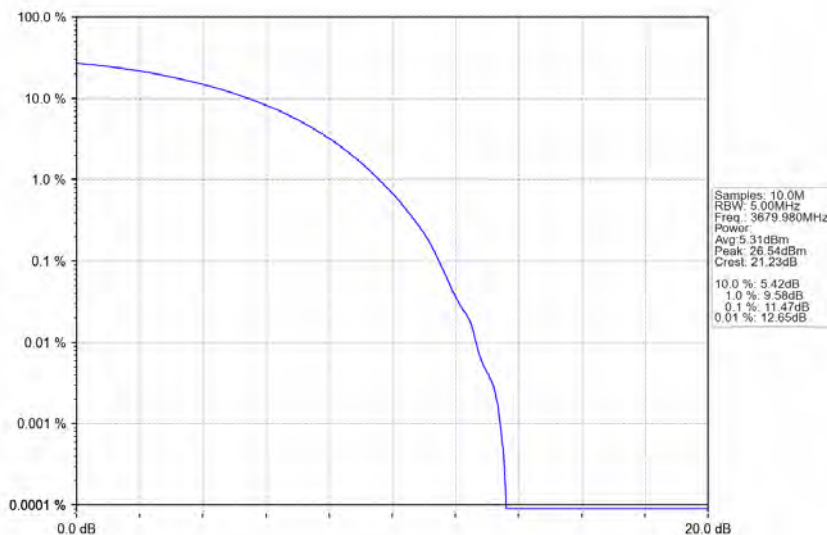
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n78d_30kHz_MIMO_NTNV_40MHz_CP-OFDM QPSK_3624.99MHz_Outer_Full



n78d_30kHz_MIMO_NTNV_40MHz_CP-OFDM QPSK_3679.98MHz_Outer_Full



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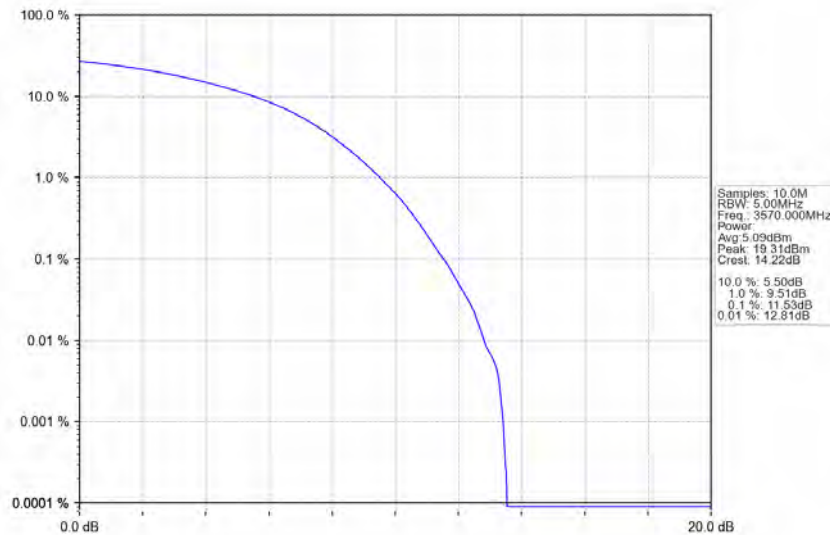
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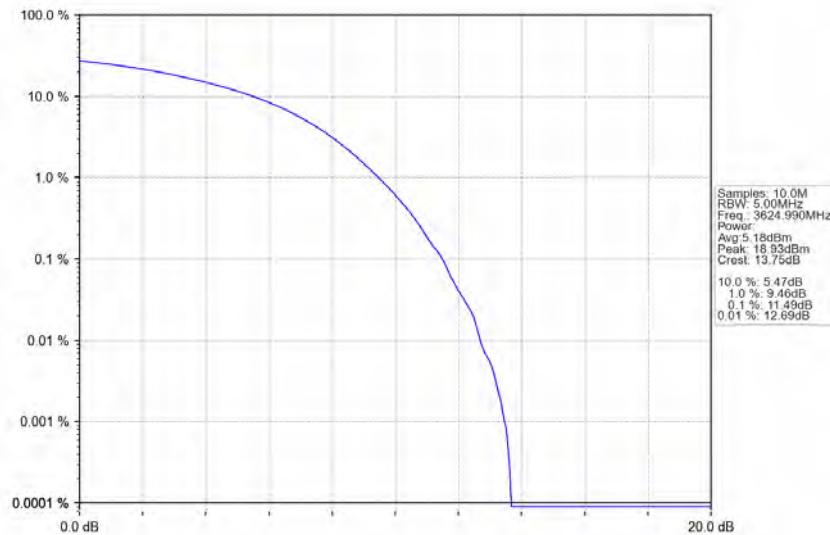
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n78d_30kHz_MIMO_NTNV_40MHz_CP-OFDM_16_QAM_3624.99MHz_Outer_Full



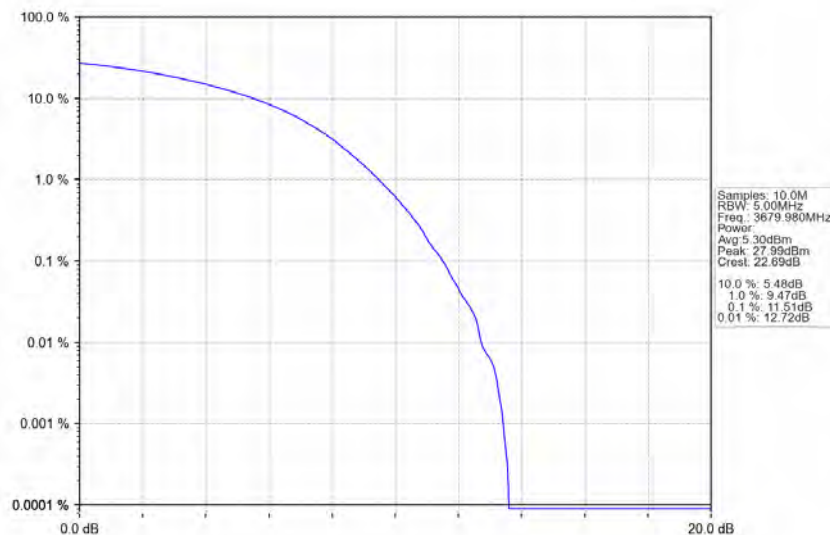
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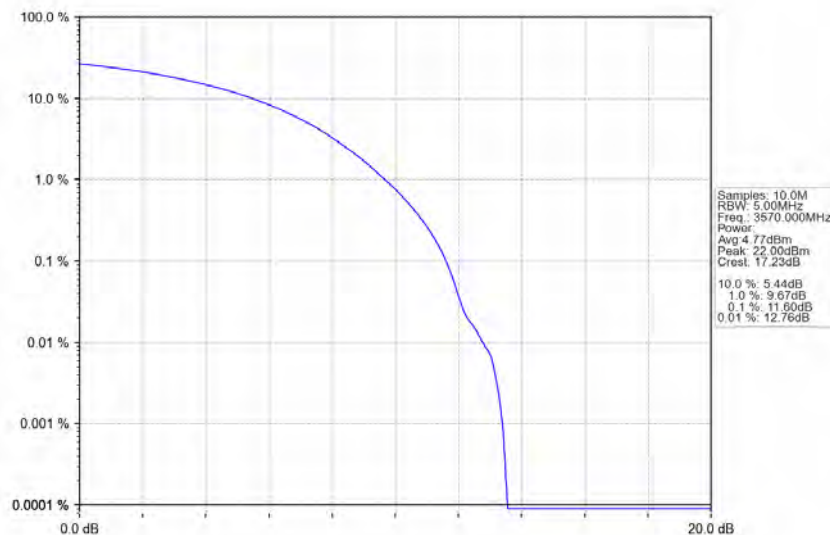
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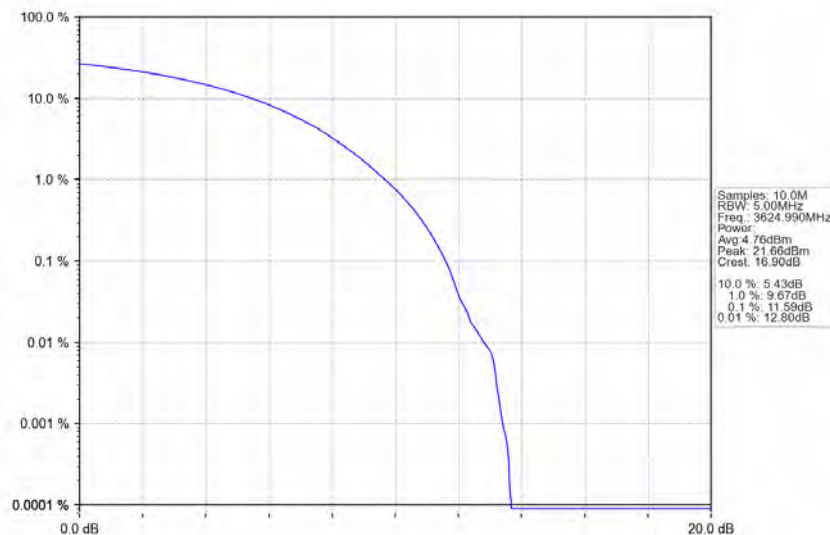
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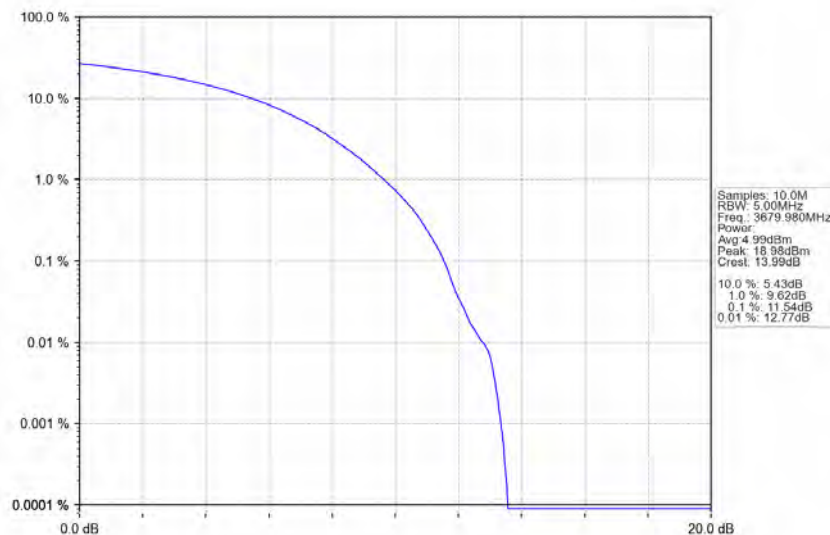
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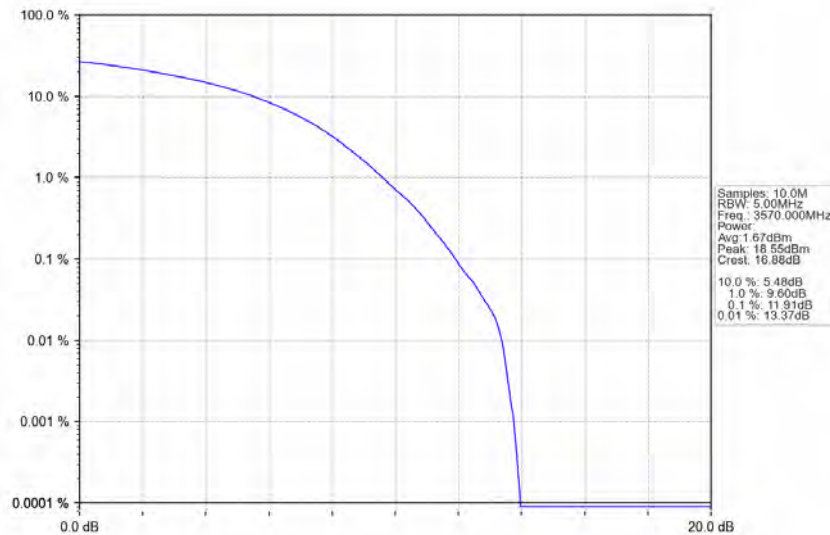
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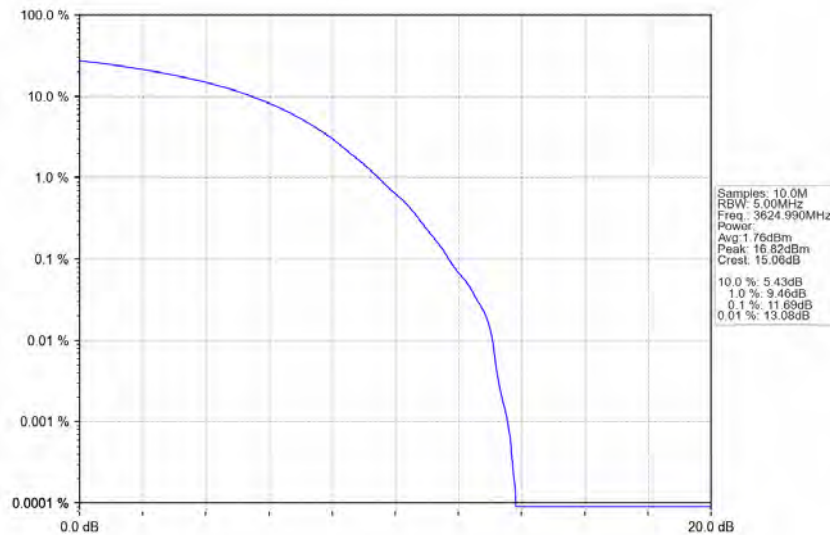
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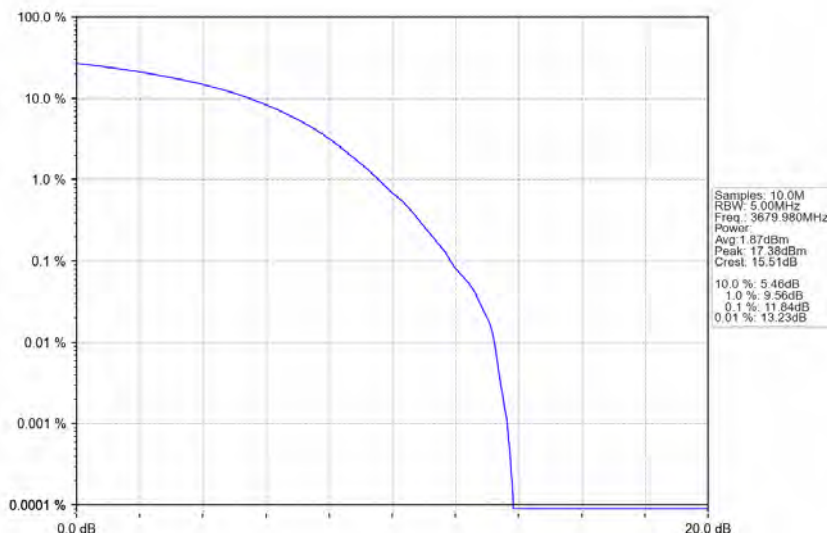
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5.6 30k_MIMO_50MHz_NTNV

5.6.1 Test Result

5G NR n78d SCS=30kHz MIMO 50MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dBm)				Verdict
			Ant1	Ant2	Sum	Limit	
CP-OFDM QPSK	3575.01	Outer_Full	11.73	/	/	<=13	Pass
	3624.99	Outer_Full	11.78	/	/	<=13	Pass
	3675	Outer_Full	11.87	/	/	<=13	Pass
CP-OFDM 16 QAM	3575.01	Outer_Full	11.41	/	/	<=13	Pass
	3624.99	Outer_Full	11.66	/	/	<=13	Pass
	3675	Outer_Full	11.52	/	/	<=13	Pass
CP-OFDM 64 QAM	3575.01	Outer_Full	11.87	/	/	<=13	Pass
	3624.99	Outer_Full	11.85	/	/	<=13	Pass
	3675	Outer_Full	11.82	/	/	<=13	Pass
CP-OFDM 256 QAM	3575.01	Outer_Full	11.94	/	/	<=13	Pass
	3624.99	Outer_Full	11.96	/	/	<=13	Pass
	3675	Outer_Full	12.07	/	/	<=13	Pass



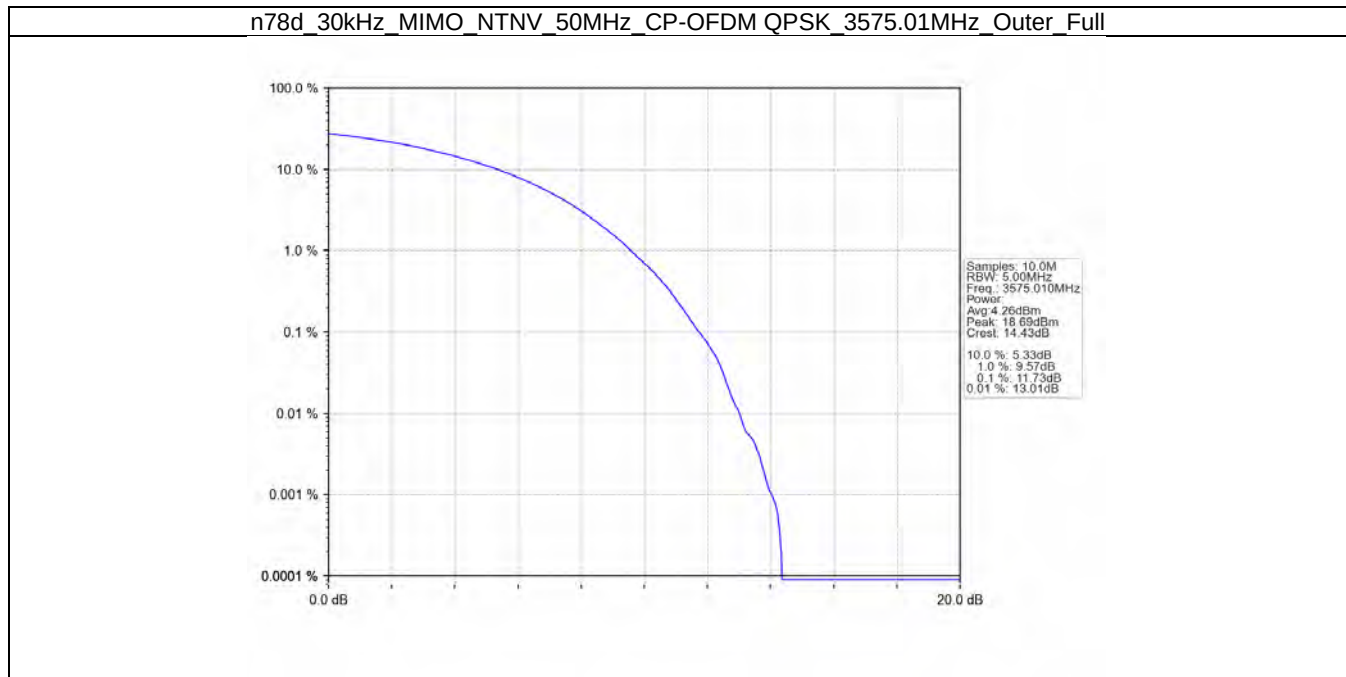
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5.6.2 Test Graph



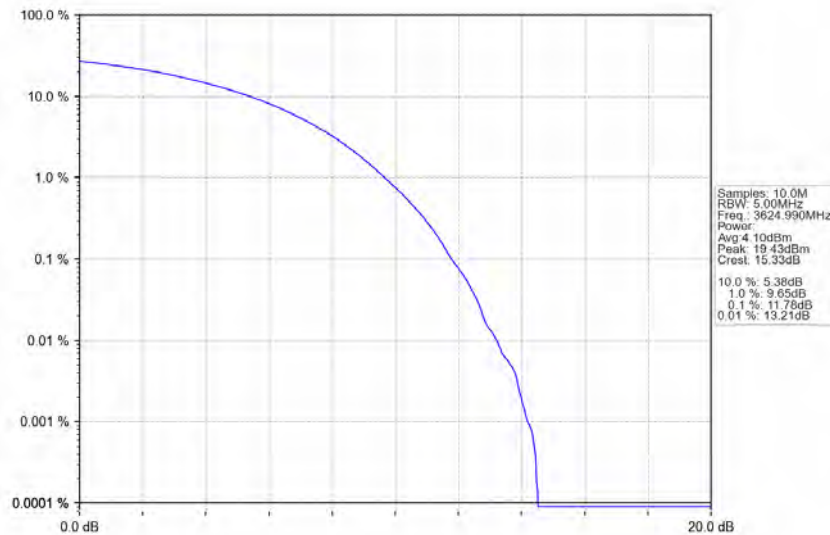
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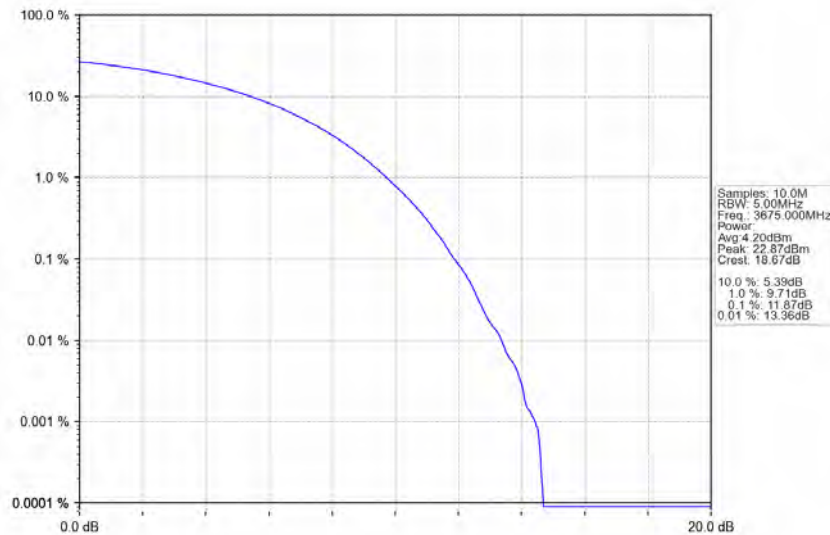
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